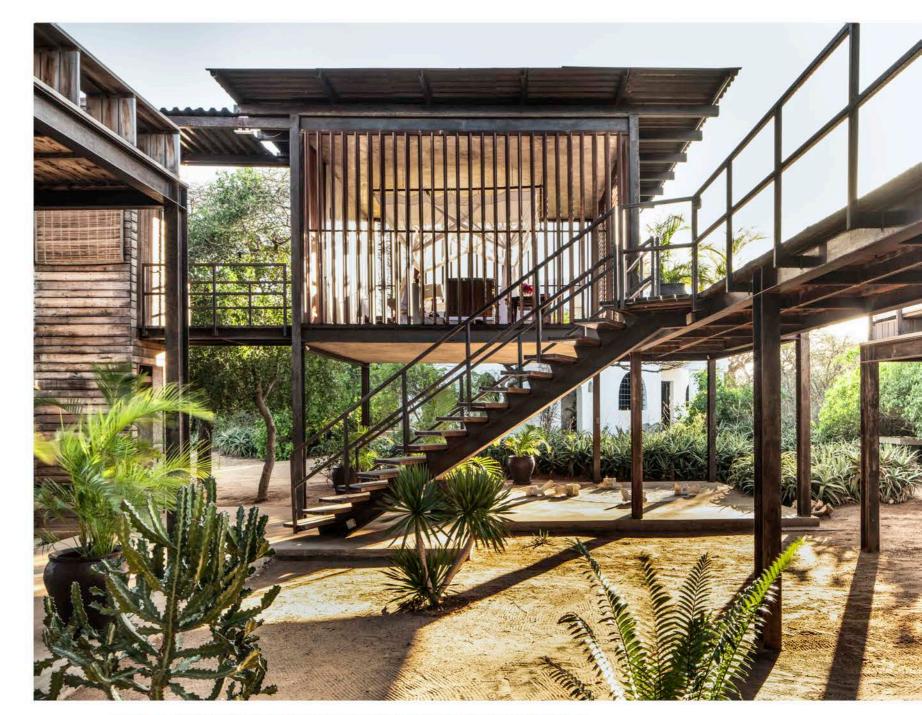
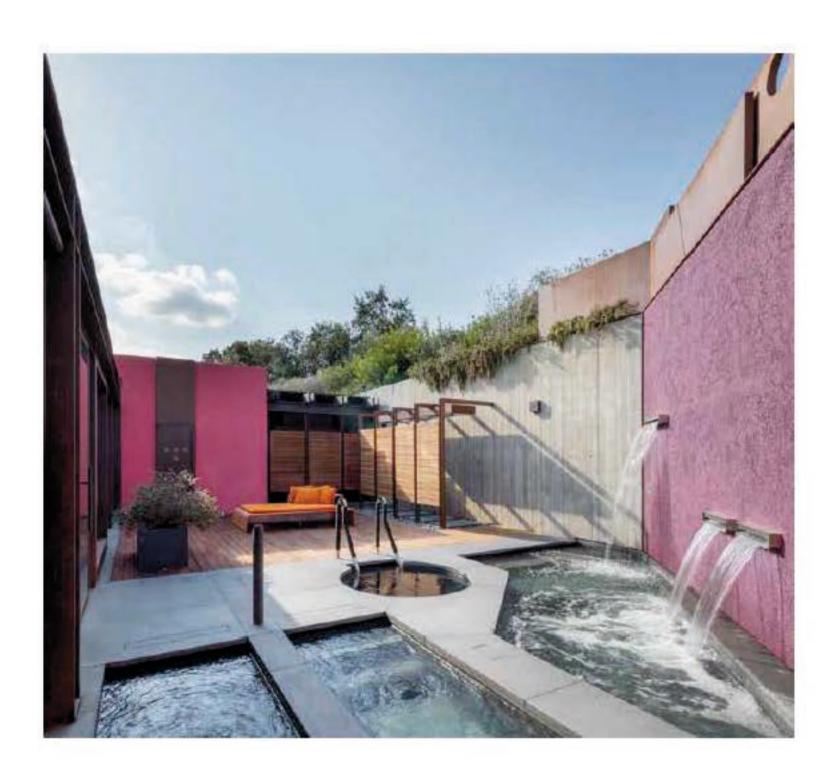
# COMPREHENSIVE ARCHITECTURE FOR A NEW WORLD

No form of human creativity is as capable as architecture when it comes to shaping our daily lives, fostering synergies, and inspiring new ways of connecting. Architecture encompasses various disciplines and even pushes technical boundaries to help us imagine a better world. PAT., an award-winning Italian studio led by a passionate trio of architects—Jacopo Testa, Andrea Veglia, and Benedetta Veglia—has recently been commissioned to redesign the Galleria Civica d'Arte Moderna e Contemporanea in Turin. Their approach to architecture is holistic, aiming to create sustainable buildings that enhance well-being: decarbonise, reduce, improve.

By Íñigo de Amescua Photography courtesy of Pat Design



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#### How does PAT. Design approach each project?

When designing a new building, we always begin with a detailed site analysis. Our initial sketches don't emerge from some poetic or mystical moment. Instead, they're informed by the sun's trajectory, prevailing winds, optimal views, road access, natural elements like trees and rocks if the site is in a landscape setting, and urban features like shops, bus stations, and cafés. We strive to spend ample time on-site, listening to what it reveals and engaging in meaningful conversations with the client to ensure the programme, budget, and objectives are crystal clear. We start with the basics. We firmly believe that the perfect building for any location is already there, waiting to be discovered. Our job is to uncover this latent energy and activate it, tailoring it to meet the needs of the client or the intended use.

We always aim to create sustainable works that make efficient use of materials and energy resources. Wastefulness doesn't align with our ethos—it's simply not part of our culture. That said, we're far from frugal! We aspire to enhance spaces and bring joy to people's lives.

### What motivates you most as architects?

Our ultimate goal is to improve people's lives: to create beautiful, functional spaces where life can flourish. Achieving this means being mindful of environmental impact, which is why we prioritise the lifecycle and global impact of our buildings. Watching a project evolve from initial sketches to a tangible reality is nothing short of magical. No two projects are alike sometimes the process flows seamlessly, but more often, it's fraught with obstacles and frustrations. Nevertheless, staying true to your ideals ensures the rewards are deeply fulfilling.

### How do you approach architecture as an integrative discipline?

We don't view architecture as the solitary work of a single genius—it's much more akin to conducting an orchestra. It's a collaborative endeavour involving clients, engineers, and specialists of all kinds. From the outset of any project, we gather everyone around the table, pose countless questions, and listen to their ideas. The architect's role is to synthesise these contributions into a cohesive whole. We trust the process. Enzo Ferrari famously said he could tell if an engine was good because it was beautiful once it finally came together. We share the same philosophy.

### How do you integrate sustainability and energy efficiency into your architectural projects?

We believe sustainability begins with trying to do more with less. To achieve this, a building's structure, roof, and

mechanical systems must work in synergy. A holistic vision is essential—one that requires discipline, logic, and a scientific approach. Unfortunately, we still too often see architects focusing on designing captivating forms, leaving engineers to figure out how to make them structurally viable.

## What are some sustainable practices or technologies that you incorporate?

For us, everything revolves around the lifecycle of buildings and their components. Decarbonising the built environment rests on two pillars: reducing operational carbon
and minimising embodied carbon. This approach guided
us in our very first project, and it remains at the core of our
practice. In summary, a building should consume minimal
energy, and that energy must come from renewable sources.
It should be constructed with as little material as possible,
and those materials should have the lowest embodied carbon achievable.

This requires questioning everything: understanding supply chains, sourcing responsibly, and, when possible, using local resources. To succeed, ecology must not be a luxury—it requires evaluating costs and carbon footprints throughout a building's lifecycle.

### What is your vision for the future of architecture?

We envision the buildings of the future as adaptable organisms, working in harmony with their surroundings to ensure the comfort of their occupants. Our ancestors knew how to design with the climate, rather than against it. It's essential that we relearn this craft. We are deeply interested in how natural elements can be harnessed in our buildings, and today, we have extraordinary tools to support this approach. Using software, for instance, we can perform dynamic analyses, collect data, set parameters, and generate location-specific solutions tailored to a site's microclimate.

Take overheating in temperate climates as an example. It's often the result of poor design. By employing solar shading, natural ventilation, and a building's thermal mass, we can avoid overheating altogether and eliminate the need for air conditioning.

#### What about bio-based materials?

This is another area we find promising—they're natural, renewable, and act as carbon sinks, absorbing COM as they grow. That said, they can present challenges in terms of durability and scalability. We are currently experimenting with agricultural lime, which boasts fascinating properties and a positive carbon balance. However, it's still not cost-effective compared to a standard brick wall and requires a great deal of craftsmanship. If we can find a way to standardise these solutions, we'll have more tools in our arsenal to combat climate change.

We need to push research into producing low-carbon steel and concrete, while acknowledging that some options already exist. There are concrete blends that are better than others and steel made from 100% recycled scrap in electric furnaces powered by wind energy. These are the kinds of circular processes we should be championing.

### The renovation of Turin's Galleria Civica d'Arte Moderna e Contemporanea (GAM) has just opened—a significant project. What would you highlight about it?

Initially, the Fondazione Torino Musei hired us to renovate the gallery lobby, but it quickly became clear that the museum's main issue was a lack of gallery space. The GAM was founded in 1961 as Italy's oldest and largest modern and contemporary art museum, housing over 47,000 works.

Moreover, the museum management had outlined an ambitious programme of temporary exhibitions. Without renovation, they would have faced difficult choices: cutting back on exhibition content or leaving much of the collection in storage. There was another possibility: the museum's second floor had been closed for years, and by 2023, no one thought it could reopen anytime soon. We then worked to strip away the superfluous, and in doing so, we restored 1,200 square metres of gallery space to the community. Furthermore, I located and restored vintage and original furniture scattered across city warehouses and offices-indeed a truly circular approach. The response has been overwhelming-visitors queue daily to explore the revamped spaces. The ground floor is now more inviting, and together with the garden, it's open to the public for free. We hope the space will become a magnet for urban life.



Portrait © Daniele Tedeschi Below: Katara Jetty dining



