

ARCHITECTURAL PRODUCTS

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PONZI VINEYARDS

From grape to glass:
Connecting outdoor
spaces with the user
experience was an
important facet to the
vineyard's design.



Research has shown that direct exposure to nature has measured short- and long-term benefits, as immersion in the outdoors is essential to mental and physical health, and improved cognitive function...

And while the building envelope is an integral part of building design, going beyond the walls and giving occupants access to natural surroundings is instrumental to productivity and wellbeing.



CREATING OUTDOOR SPACES: **ROOM(S) TO BREATHE**





A shared aesthetic philosophy: clients and collaboration

Architectural Products searched internationally to find trends. To reach the quality of achievement, the technical skills of the design team are often in close partnership with the foresight and philosophy of the client or organization.

This year, for our annual international design report, we have identified six categories of projects. To make our short list, they were evaluated on the originality expressed by the solution devised to meet the owner's objectives and the creation of

examples of applied art by the skillful combination of such elements as materials, light, form, color and texture, executed in new and dramatic techniques. In reviewing the projects for this report, a high level of visual communication—through the design of the

- Building Shape and Geometry
- Exterior Skin Treatments
- Sustainable Lighting
- Daylighting Designs
- Exhibits and Display
- Exterior and Interior Transparency

built environment—is succeeding to the benefit of users engaged in all pursuits. It appeared evident that the technical skills of the design team are often in close partnership with the foresight and philosophy of the client.

by Vilma Barr, contributing writer

◀ **Project:** Métropole Rouen Normandie
Location: Rouen, France
Architect: Jacques Ferrier Architecture



Photo: Kuomin Lee

A LIVING ARTWORK

The third generation owners of the Molecule Pharmacy derived the name from the tradition of extracting molecules from nature to synthesize healing drugs. Their pharmacy's design is a totally new interpretation of a pharmacy environment. Using metal, glass and transparent acrylics, the entire space appears to float with an abstract art atmosphere. The curvy staircase is copper.

Project:

Molecule Pharmacy

Location:

Taichung, Taiwan

Architect:

Waterfrom Design

Materials that allow the viewer to see what is close to them and what is distant create scenarios that engage their sense of perspective. It is most basic with clear glass or other material, heightened when color or texture are presented. The technique can be used sparingly, for emphasis or accent, as the Maggie Centre Barts' exterior, or as a full interior surround for the Molecule Pharmacy, or as a dominant building cladding for the Métropole Rouen.

**Project:** Métropole Rouen

Normandie

Location: Rouen, France

Architect: Jacques Ferrier
Architecture



Photo: Larc Boagly

GLOWING URBAN SYMBOL

The 89,000-sq.-ft. main municipal building for the port city of Rouen, on the banks of the Seine, is comprised of two bi-directional angled structures. Fish-like scales of colored glass enliven the façade by reflecting and refracting the sun's light and the river's water. A layer of metal oxide creates the iridescence that disappears inside. The double-layer glass provides passive thermal protection, while the gap between the buildings brings daylighting to the lower floors.



Building Shape and Geometry

A building's personality is judged from many viewing angles. It speaks to the observer in numerous visual languages, simultaneously. It is the sculpture of the built environment, whether many stories tall, or at ground level. Some profiles of recent buildings swoop and swirl; others employ angular shapes, extending outward or recessed into the structure. Visual reality (VR) and augmented

reality (AR) are changing the design process. VR affords a direct, visually immersive sense of the space and surface, engaging clients and end users as active design participants. Application of AR lets clients and design teams model and test options in real time, sharing performance data as they do so. Computational design is a valuable

tool for today's designers and fabricators to develop new forms and test their feasibility and performance while a project is still in the design phase.



SYMBOLIC SHAPES

In Northwest Russia on the Baltic Sea, two sculptural structures rise from the flat landscape. Their function is a wine and brandy distillery and museum for Alliance-1892, a Moscow-based firm that sells its branded products internationally. The architects drew their inspiration from the classical Christian belief of the grapevine as a mystical symbol. The low wooden building is the warehouse, which represents being bound to the earth. The metal tower houses the distillery and the museum, reaching for the sky. Total size for both buildings is 17,000 sq. ft.

Project: Alliance -1892 Distillery
Location: Chernyakhovsk, Russia
Architect: Totement/Paper



Photos: Gleb Leonov

Daylighting Design

The science of daylighting design is not just how to provide enough daylight in an occupied space, but how to do so without any undesirable side effects, says Gregg D. Ander, FAIA, for DOE-sponsored guidelines for new construction or major renovations. Schools, museums, public buildings and workplaces are taking advantage of daylighting benefits to help create a visually stimulating and productive environment

for visitors and occupants, while reducing as much as one-third of total building energy costs. To be successful, an integrated design approach, Ander says, is required relative to building form, siting, climate, building components such as windows and skylights, lighting controls and lighting design criteria. Daylight-responsive electric lighting controls are absolutely essential, Anders emphasizes, to any daylighting system.



Project: Maersk Tower
Location: Copenhagen, Denmark
Architect: C.F. Møller Architects

Project: IKC Zeven Zeeën
Location: Amsterdam, Netherlands
Architect: Moke Architecten



Photos: Thijs Wolzak

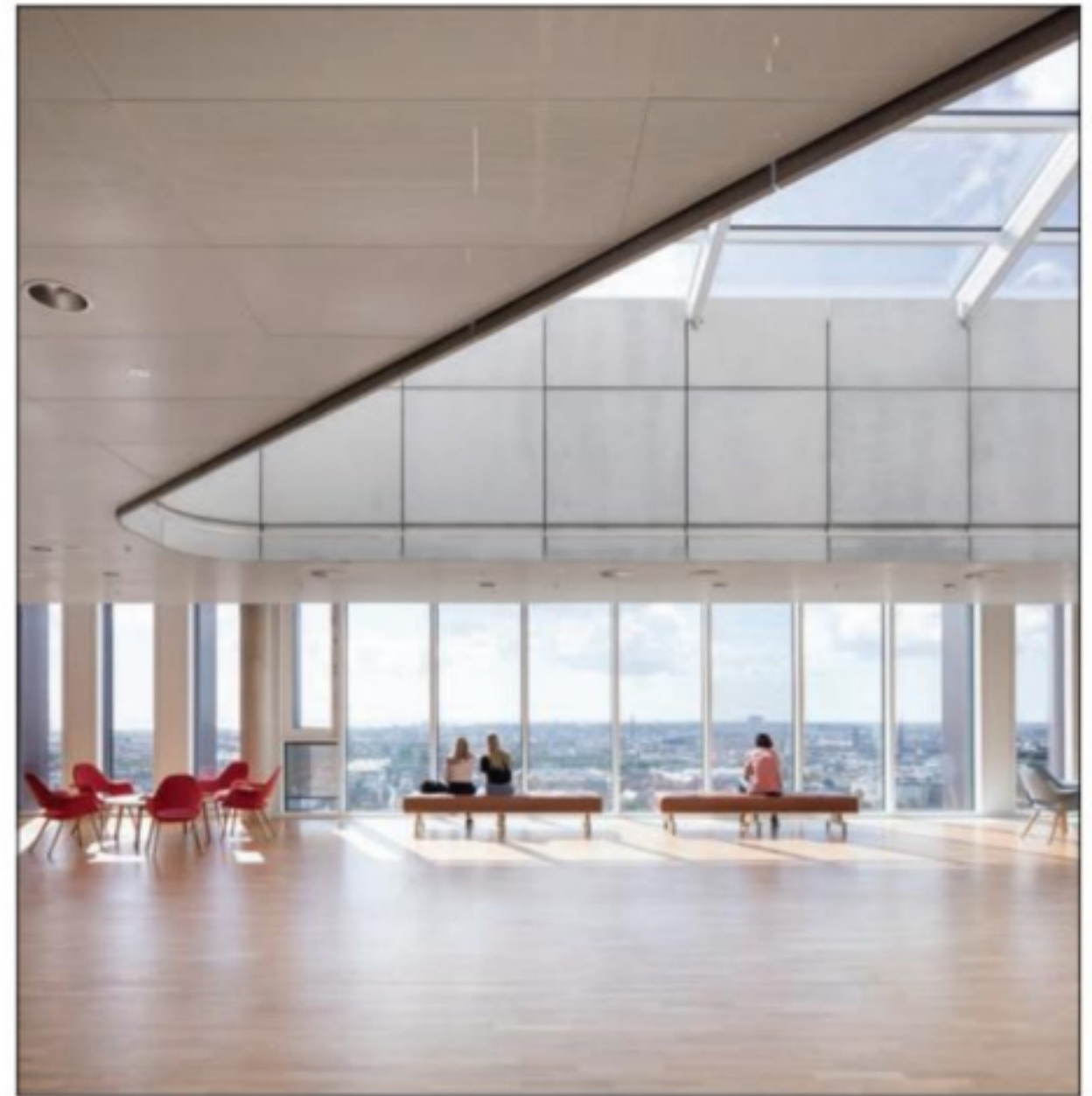


ROUND AND RED

With its multi-size round windows and bright red scaly façade, the IKC Zeven Zeeën presents a lively face as a place for children who range in age from a few months old up to age 12. Care and activity centers, classrooms and a parents' room occupy the two-story structure. One of the first completely energy neutral schools in the Netherlands, the double prefab textured red concrete façade is predominantly north-facing. Circular recessed windows are framed with wood. During the night, the room temperature drops naturally. PV-panels are roof-mounted.



Photos: Adam Mark, BYGST and Dräger Luftfoto

**CONNECTING ATRIUM**

Maersk Tower is an extension of Panum, the University of Copenhagen's Faculty of Health and Medical Sciences. Its façade is a grid of story-high, copper-covered shutters that adjust to protect from direct sunlight and overheating. An open atrium connects the 15 floors, with an open "science plaza" functioning as a daylit meeting place and communal space on each floor.

"Controlling the way in which light passes from the outside to the inside is like constructing a framework that supports the whole project."

—Elsa Valero Ramos, *Light in Architecture: The Intangible Material*

EXPANDING A CLASSIC

Originally designed in 1963 by architect and designer Gerrit Rietveld, the collection underwent an expansion with the addition of an open and transparent entrance hall. The curved façade is formed by cold bent glass, with 30 glass roof fins, connecting the new entry space to the Rietveld cube-shape structure and an existing exhibition hall.



Project: Van Gogh Museum
Location: Amsterdam.
Architect: Kisho Krokawa Architect & Assocs.



Photos Courtesy: Van Gogh Museum