



Ventilation system mit earth collector, heat recovery and fresh air preheating unit

Development



PH-RESIDENTIAL HOUSING Vorgartenstraße



OBJECT INFORMATION

Object: 61 Apartments, 19 Workplaces, 1 Kindergarten
Developer: Kallco Bauträger GmbH
Planning: Treberspurg & Partner Architekten ZT GmbH, Wien
Bauphysic: Technisches Büro Wilhelm Hofbauer
Completion: Juni 2011
Heating Energy : 7 kWh/(m²a) gemäß OIB RL



PH-RESIDENTIAL HOUSING ROSCHEGASSE

Pantucekgasse Roschegasse 20, 1110 Vienna

Type:	social residential building
Developer:	a:h, gemeinn. Siedlungsgenoss. Altmannsdorf - Hetzendorf
Design&Planning:	Treberspurg & Partner Architekten ZT GmbH
Completion:	2006
Size:	9.900 m ² living space, 114 apartments, common areas, underground car park
Heating Energy:	7,3 kWh/(m ² a) (PHPP)
Netto building costs:	1.212 EURO/m ² living space

Dec. 2006 biggest social residential Passive House!

PH-RESIDENTIAL HOUSING ROSCHEGASSE

Pantucekgasse Roschegasse 20, 1110 Vienna



[source: bingmaps]

PH-RESIDENTIAL HOUSING ROSCHEGASSE

Pantucekgasse Roschegasse 20, 1110 Vienna



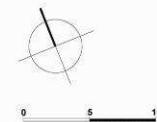
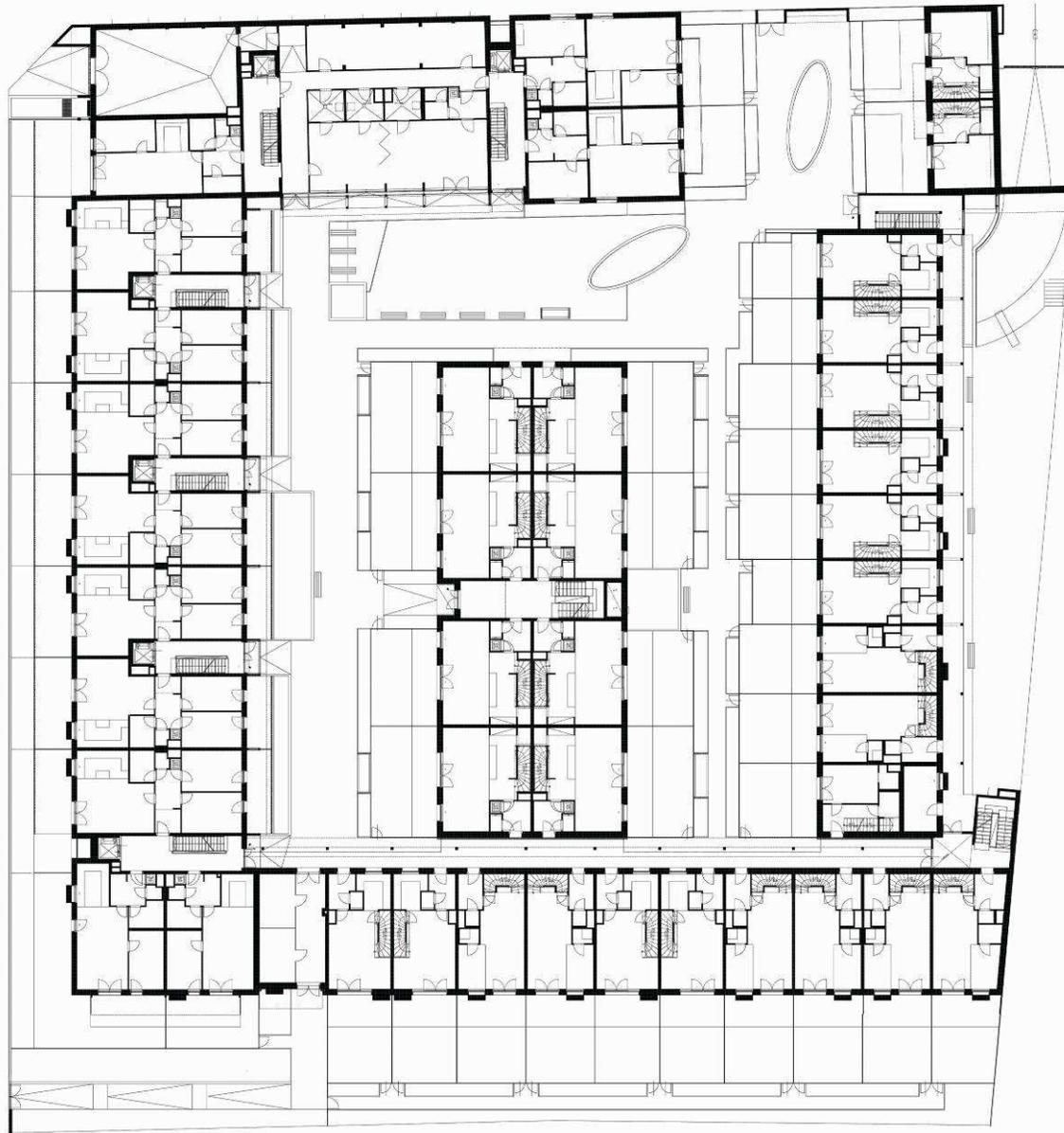
[Treberspurg & Partner Architekten ZT GmbH, Vienna]

PH-RESIDENTIAL HOUSING ROSCHEGASSE

Pantucekgasse Roschegasse 20, 1110 Vienna



[Treberspurg & Partner Architekten ZT GmbH, Vienna]



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Ground plan



Construction Details

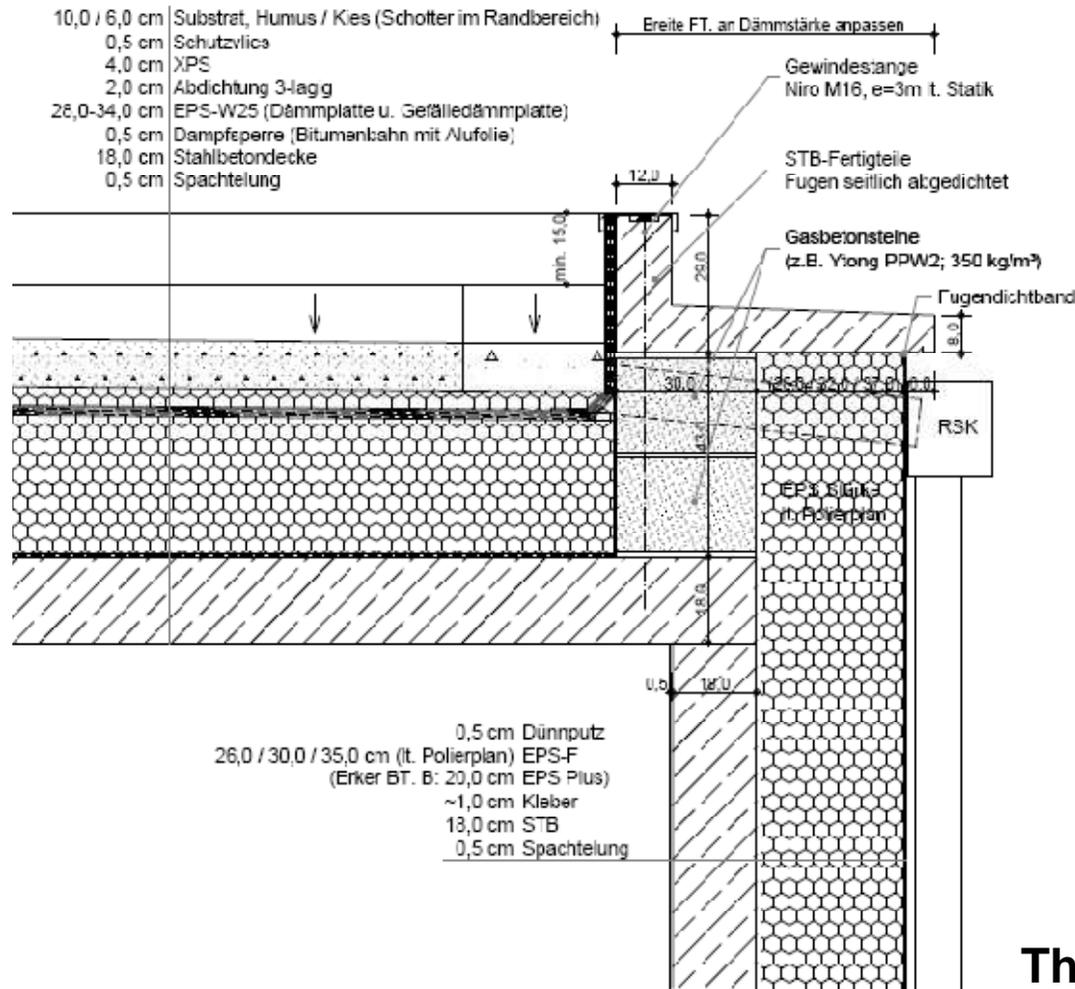
Foundation



Thermic detached base-points above cellar

Construction Details

Attic



Thermic detached attic connection

Construction Details

Attic

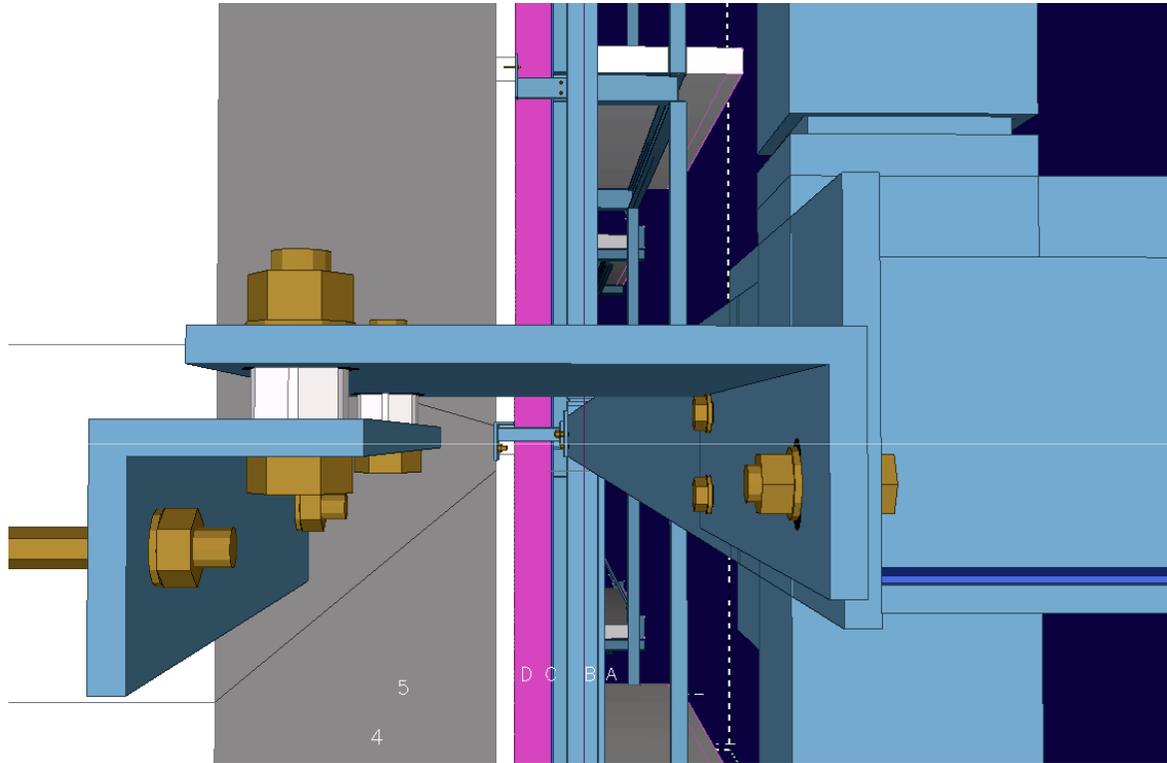


Thermic detached attic connection



Construction Details

Loggia scaffold – access balcony - anchoring



Detail Anchoring

Construction Details

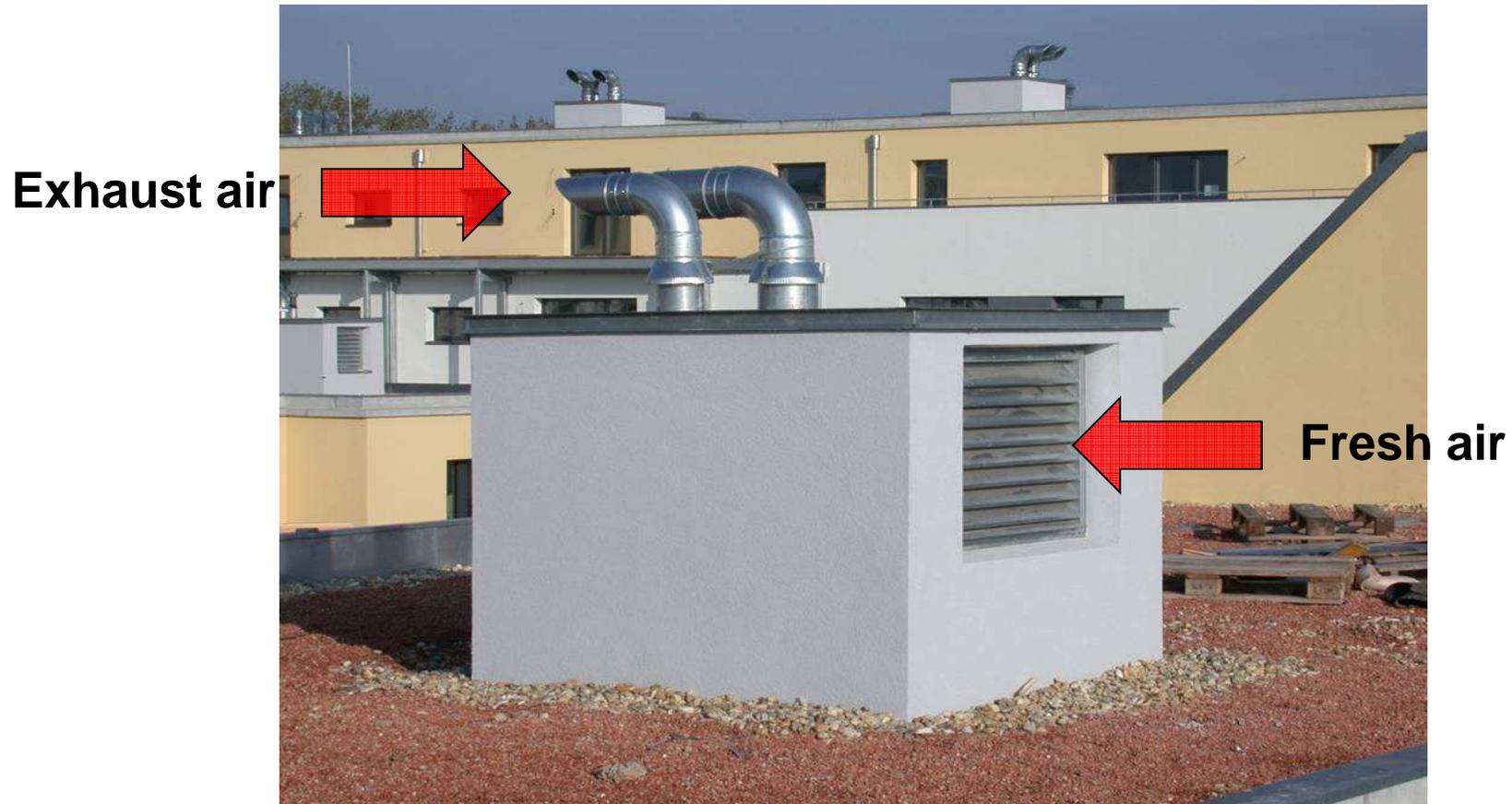


Thermic scaffold

BUILDING SERVICES CONCEPT

- decentralised ventilation compact system with PH- Compactinstruments Aeorsmart S of Drexel & Weiss in every apartment.
- air preheating through 11 geothermal sensors in 100 m depth, Solezwischenkreis and heat exchanger on the roof as fresh air-exhausts.
- A small electrical radiant heater in the bathroom, an electrical radiator, controlled by the compact instrument for peak demand
- Photovoltaic cells on the southern façade

BUILDING SERVICES CONCEPT

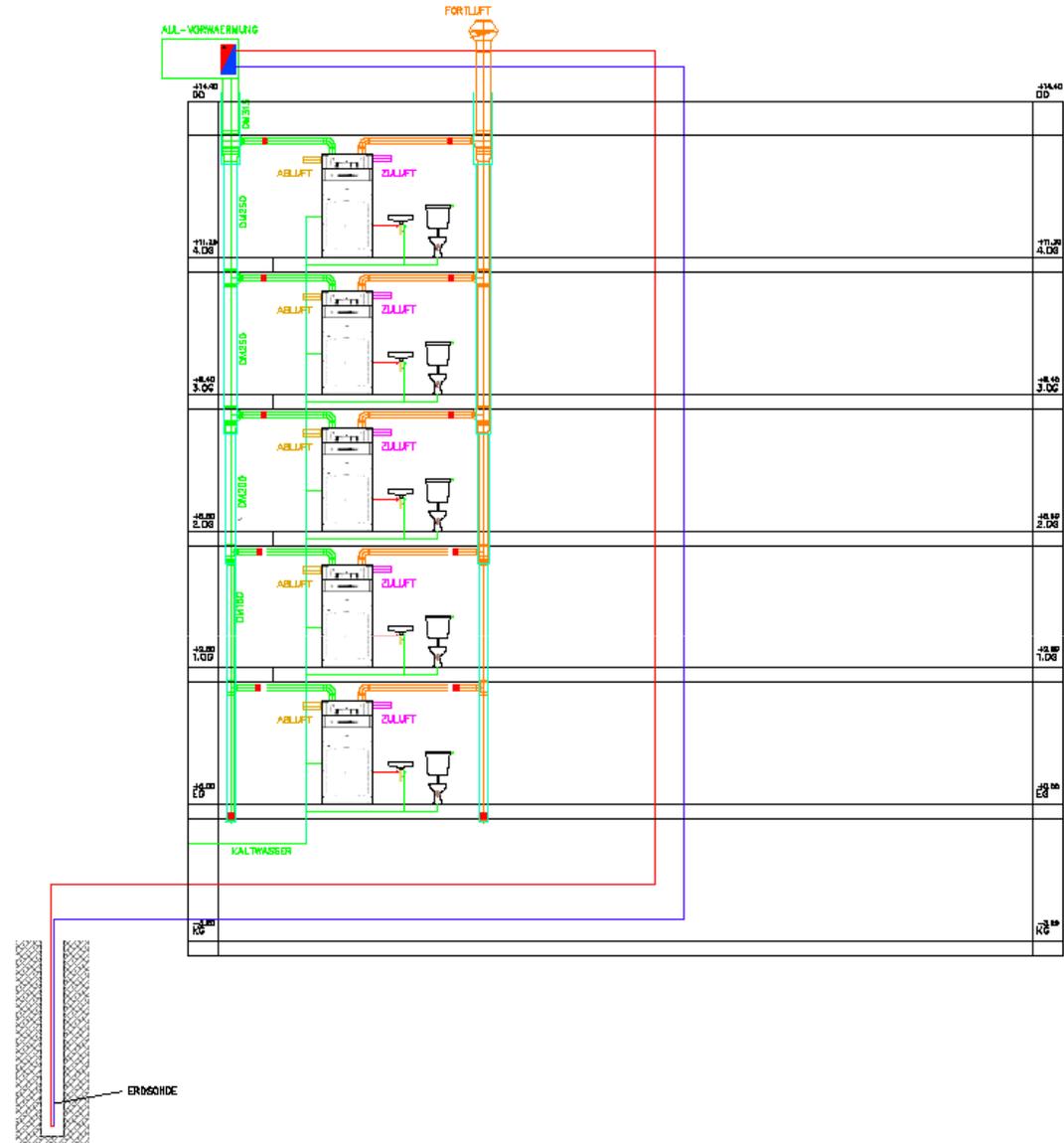


Ventilation facilities at the Roof

BUILDING SERVICES CONCEPT

Function ventilation

- Passivhouse ventilation through decentralised ventilation instruments every apartment
- Air preheating through heat exchangers and geothermal energy sensors
- Warm water preparation decentralised due to hydro-extractors

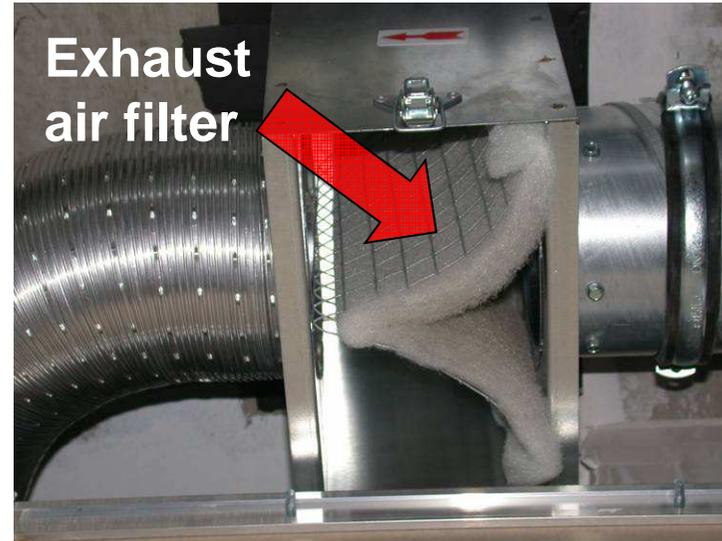


BUILDING SERVICES CONCEPT



Kompaktlüftungsgerät

Cover for the filter change in the ceiling



BUILDING SERVICES CONCEPT



Luftverteilung in abgehängten Decken

HIGH SCHOOL HAIZINGERGASSE

Hainzingerasse 37, 1180 Vienna
OLD BUILDING MODERNISATION – SCHOOL RECONSTRUCTION

1.808 m² before
4.986 m² after

OBJECT DATA

Type:	School Building Reconstruction and Rebuilding
Constructor:	BIG GmbH
General Planning:	Treberspurg & Partner ZT GmbH
Completed:	2000
Dimension:	ca. 5.000 m ²
Netto Building Costs:	ca. 7,27 Mio. EURO











TERRACED HOUSE - NATURE NEARBY LIVING

Fred Raymondgasse 19, 1220 Vienna

OBJECT DATA

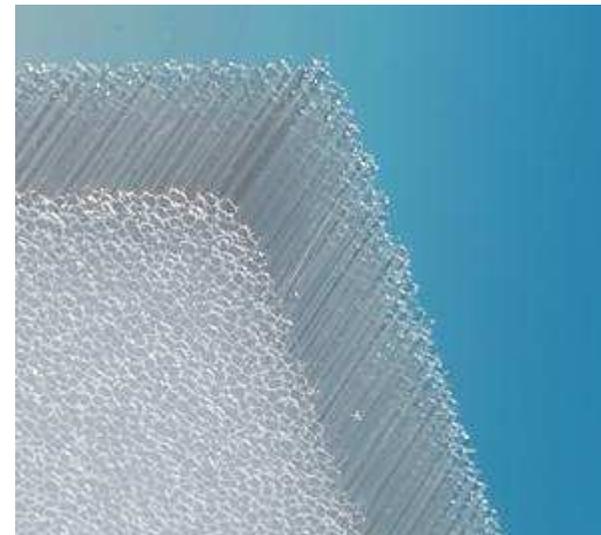
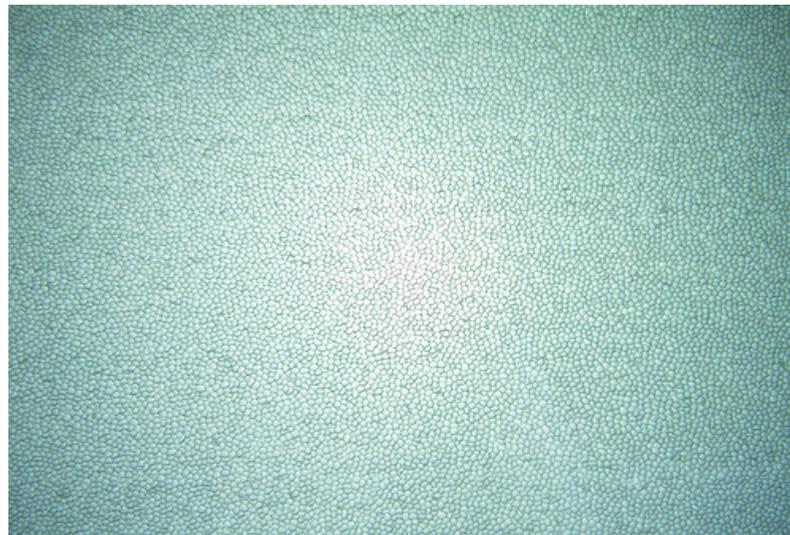
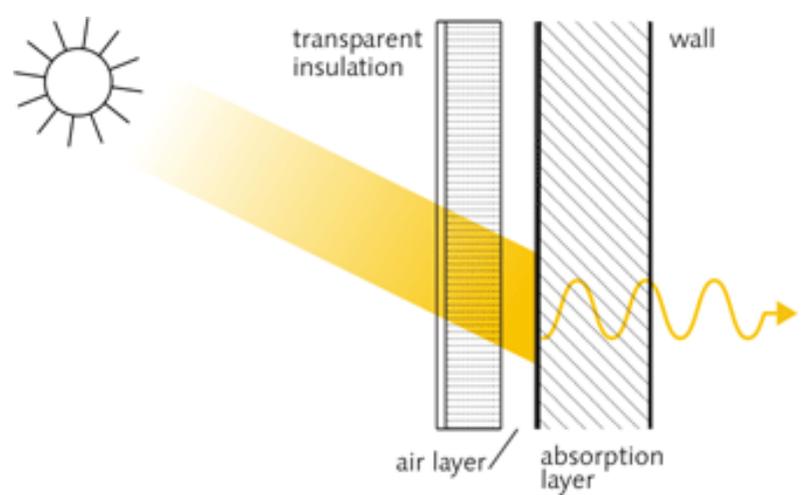
Type:	New Building of Terraced Houses
Constructor:	Stadt Vienna, MA 24
General Planning:	Arch. DI Dr. Martin Treberspurg
Bauphysics:	DI Wilhelm Hofbauer
Completed:	1996
Dimension:	4.300 m ²
Amount :	41 accommodation units, 1 community centre
Heating energy demand:	40 kWh/(m ² a)
Netto Building Costs:	ca. 5,23 Mio. EURO



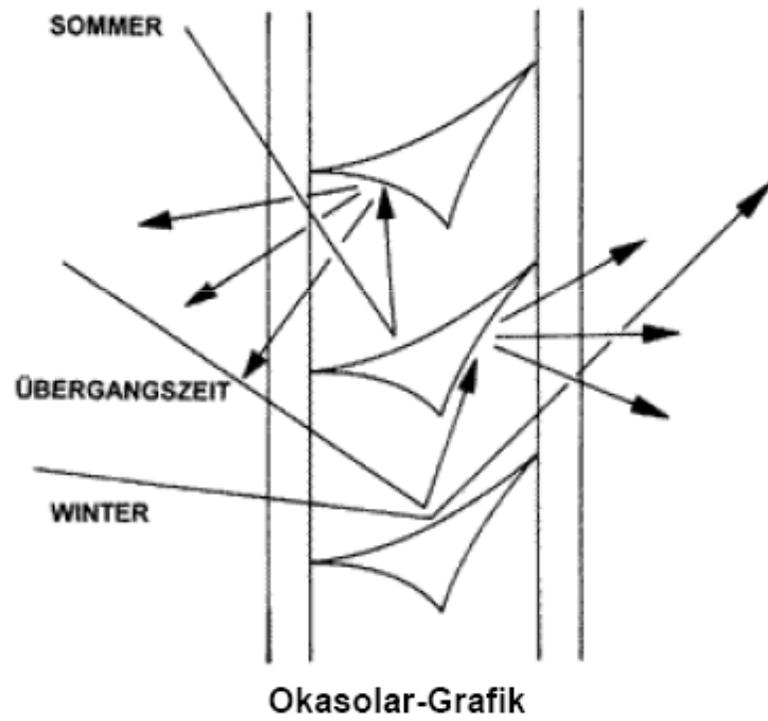




Transparent thermal insulation

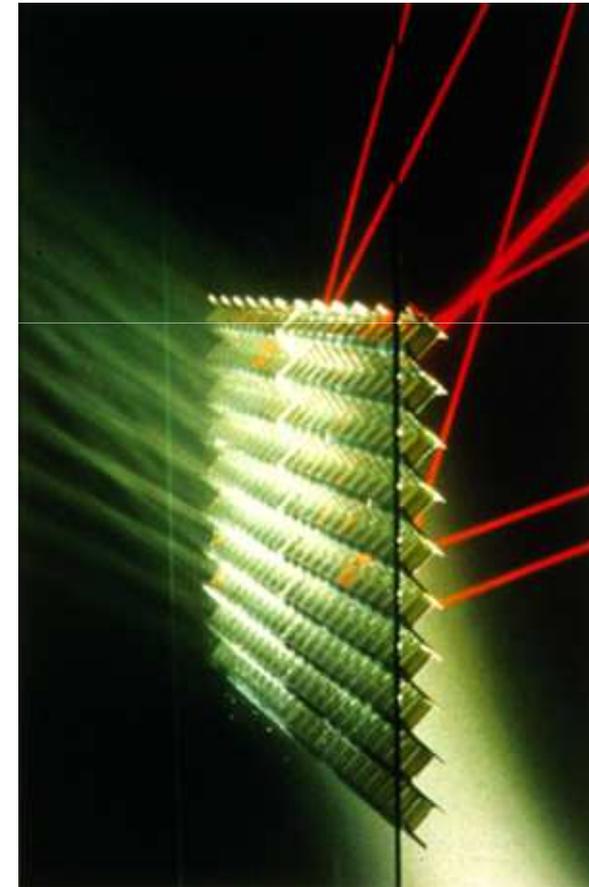
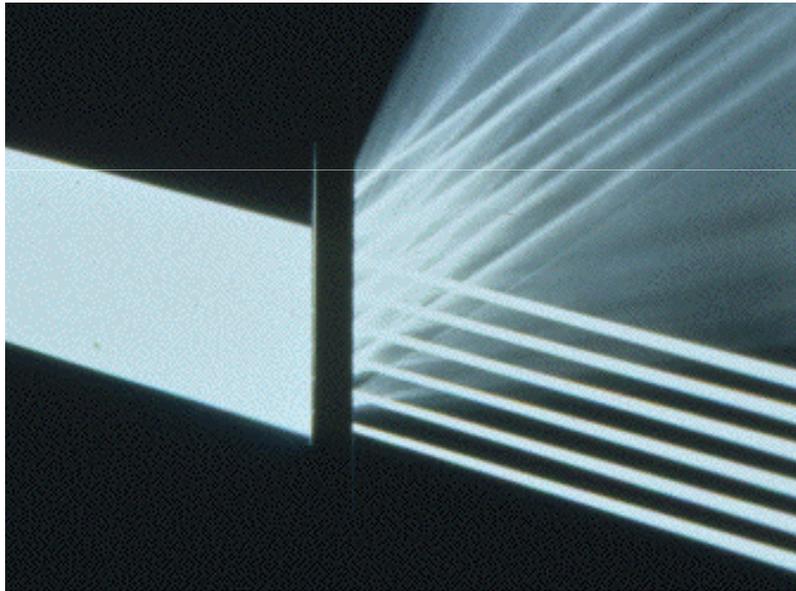


Sun windows



Sun windows

Isoliergläser mit fest angeordneten Spiegelprofilen
im Luftzwischenraum



Example for Sun window



AM HIRSCHENFELD

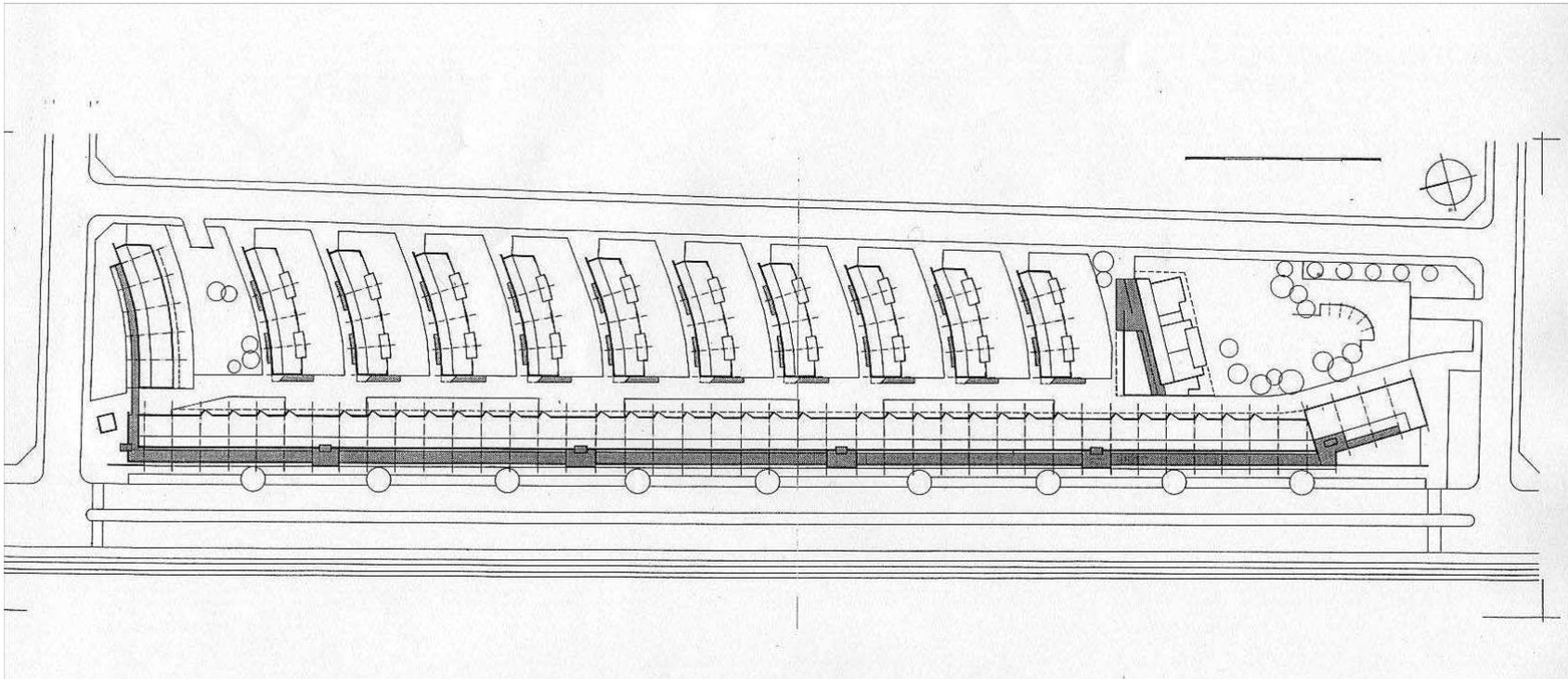
MULTI-RESIDENTIAL BUILDING

Brünner Straße 190, 1210 Vienna

OBJECT DATA

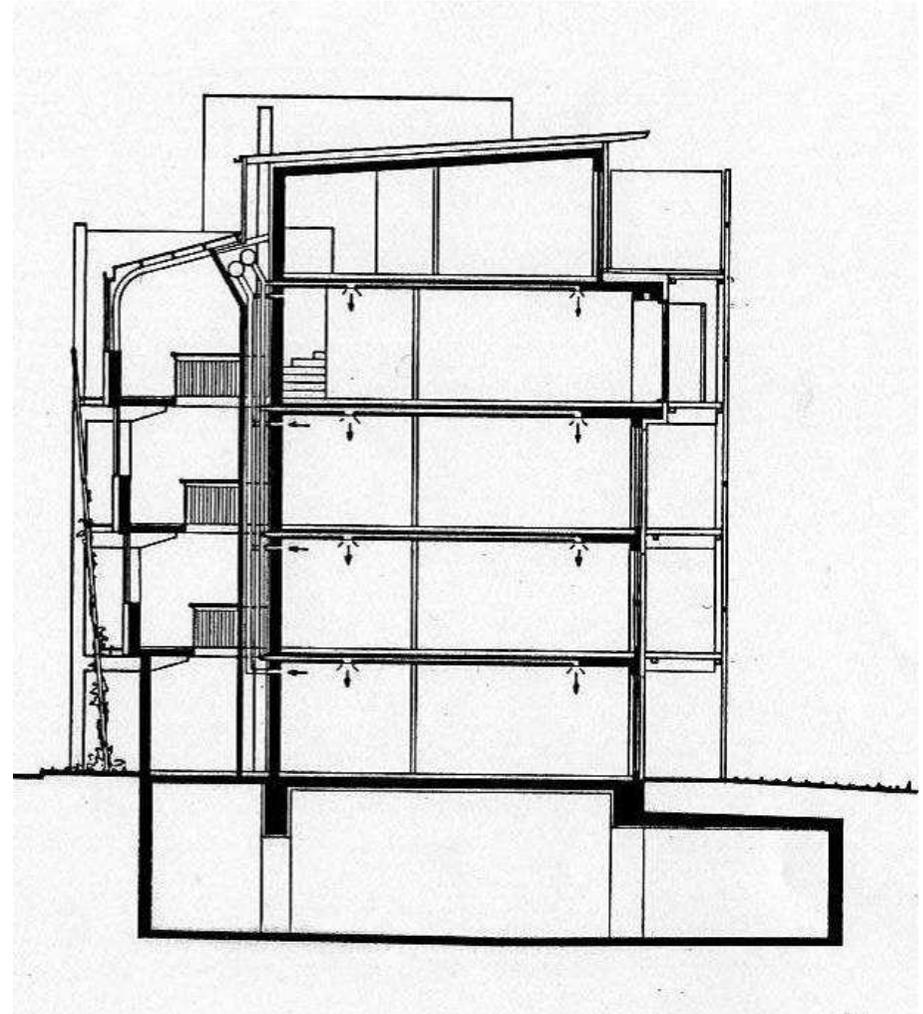
Type:	New building of Multi-family Houses
Constructor:	GESIBA, gemeinn. Siedlungs- und Bau AG
Planing:	Arge Architekten Reinberg - Treberspurg - Raith
Completed:	1996
Size:	23.380 m ²
Amount:	215 accommod. units, KIGA, pub, basement garage
Heating energy demand:	Line: 22 kWh/(m ² a), Houses: 35 kWh/(m ² a)
Netto Building Costs:	ca. 24 Mio. EURO

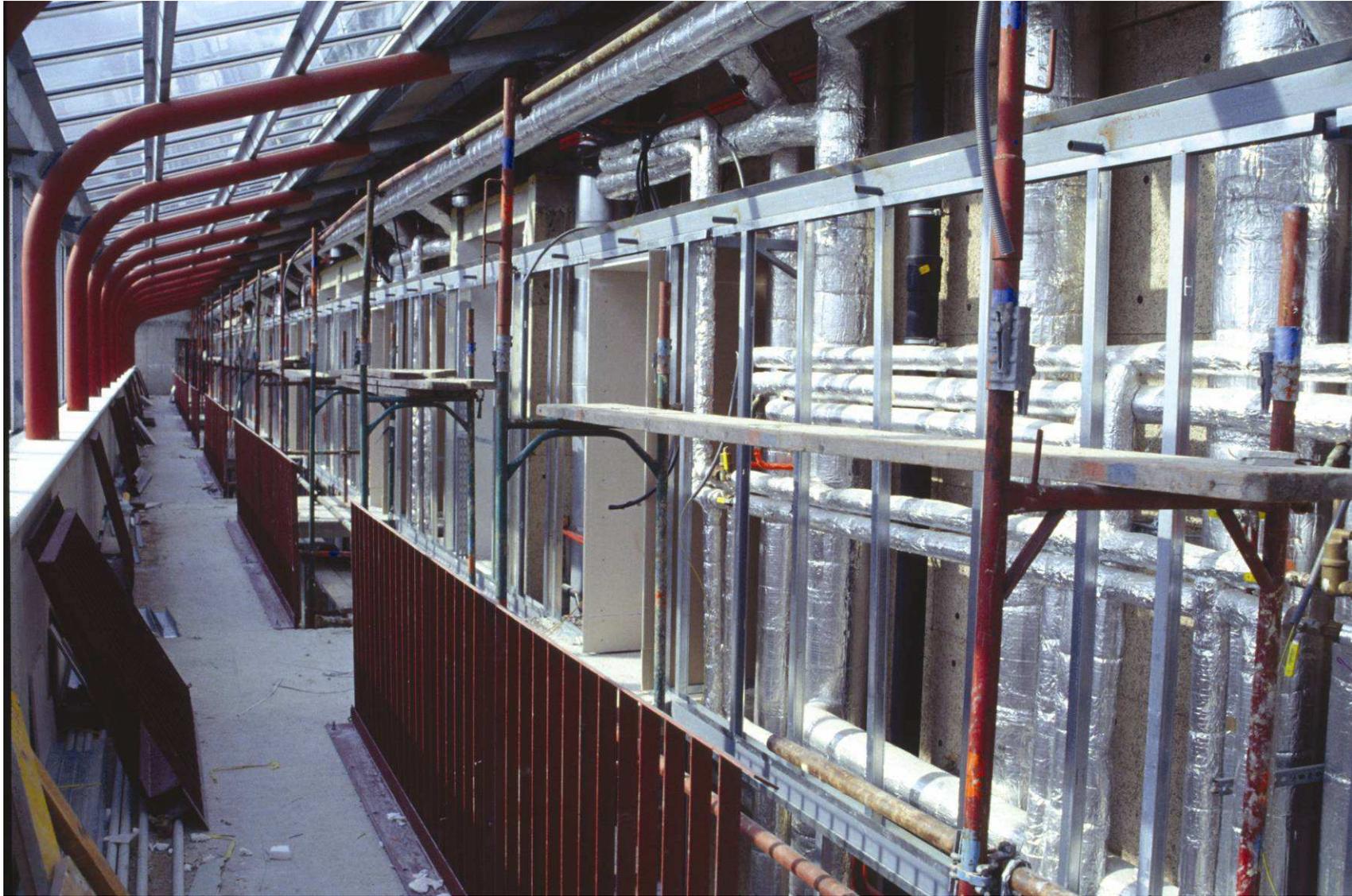
Focus: Forerunner of passive house concept: mechanical ventilation system with heat recovery in Line, district heating















Green Roofs

Spar Supermarket



Engerthstraße 230A, 1020 Vienna

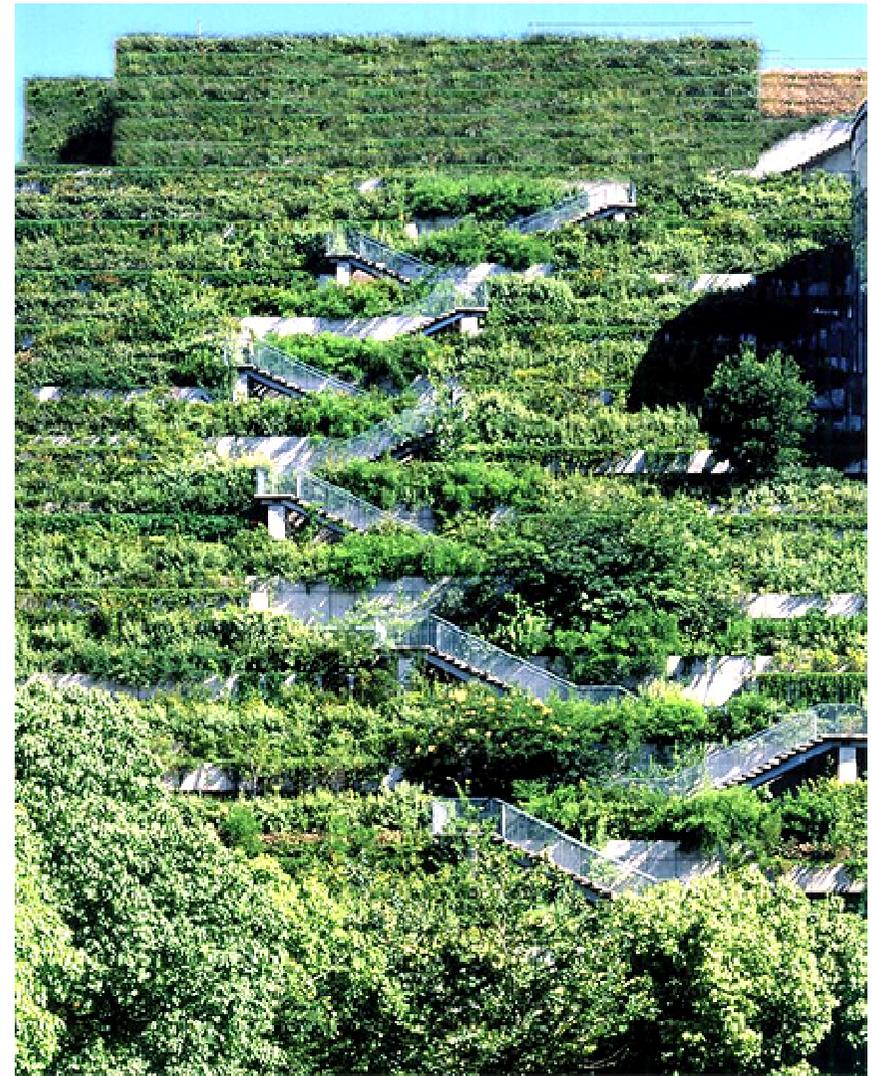
Used space: 684 m²

Green space: 1.105 m²

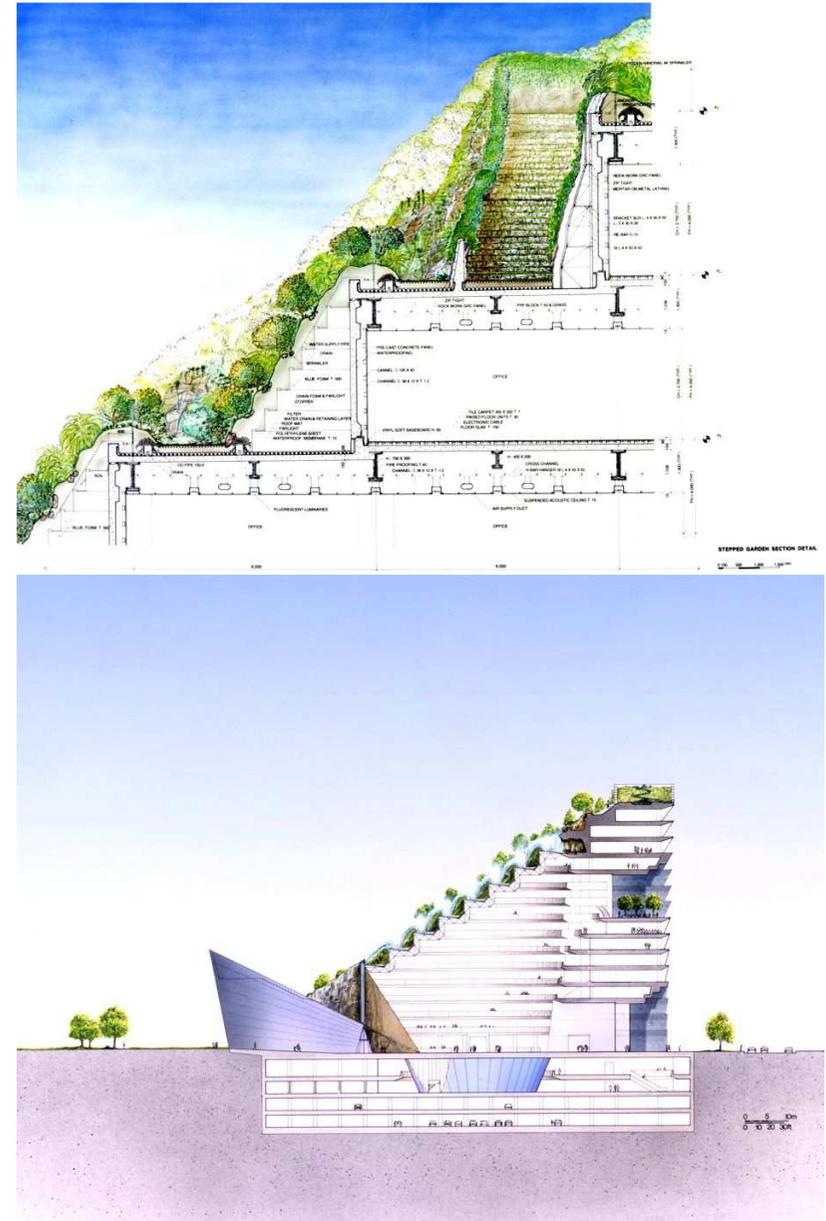
- 230 m² for sport







ACROS Fukuoka, offices under green terraces – Japan



ACROS Fukuoka, offices under green terraces – Japan



Art and Exhibition Hall roof garden – Bonn, Germany.



Chicago City Hall – the coolest place to be, thanks to this \$2.5 million rooftop garden (*not* open to the public – the 11-storey drop might have something to do with this).



Green Walls

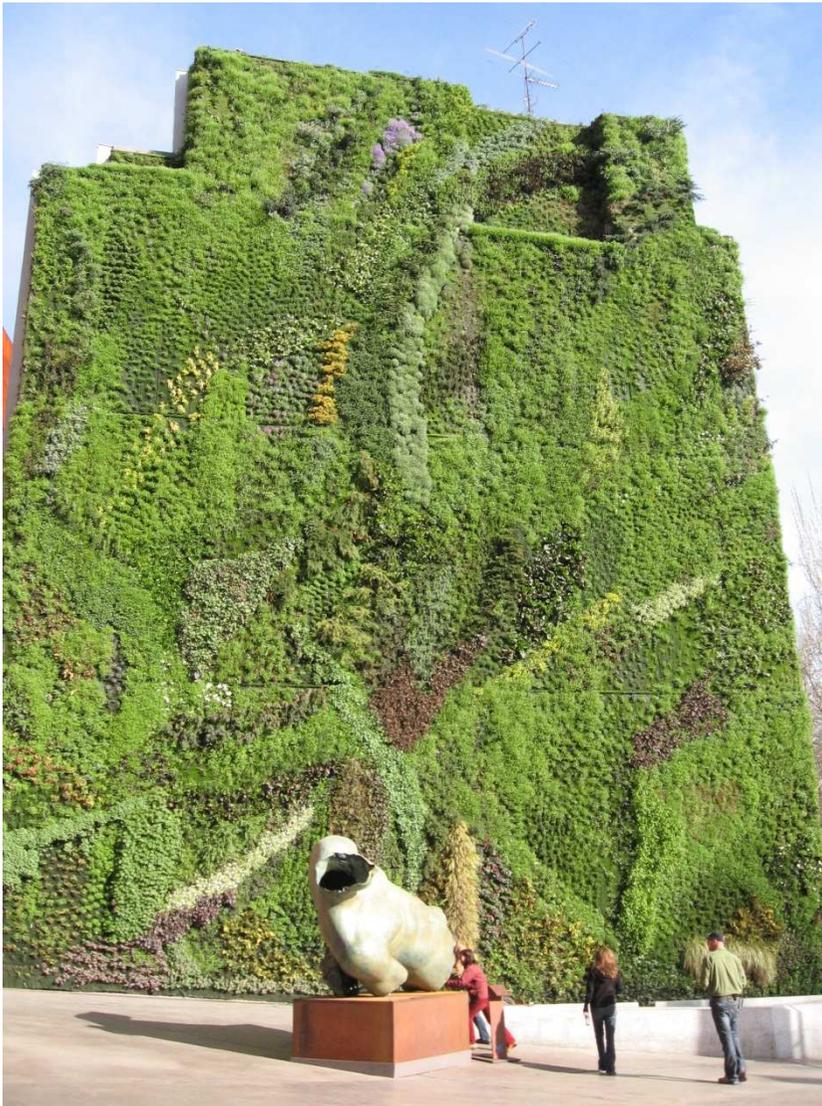


Patrick Blanc's unique vertical garden



Musée du quai Branly / Quai Branly Museum , Paris

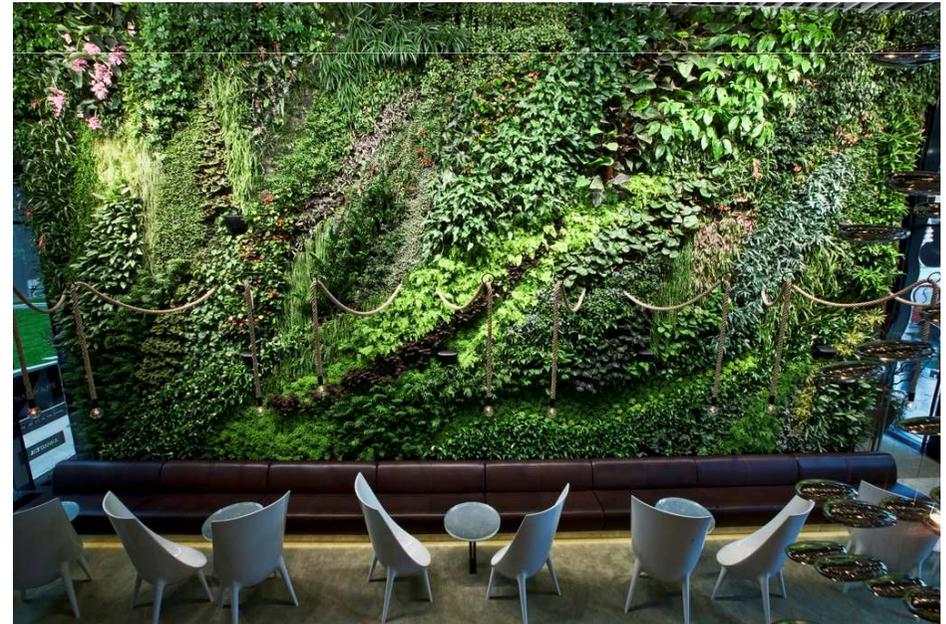




CaixaForum, Museum in Madrid



J&T Bank Cafee, Bratislava

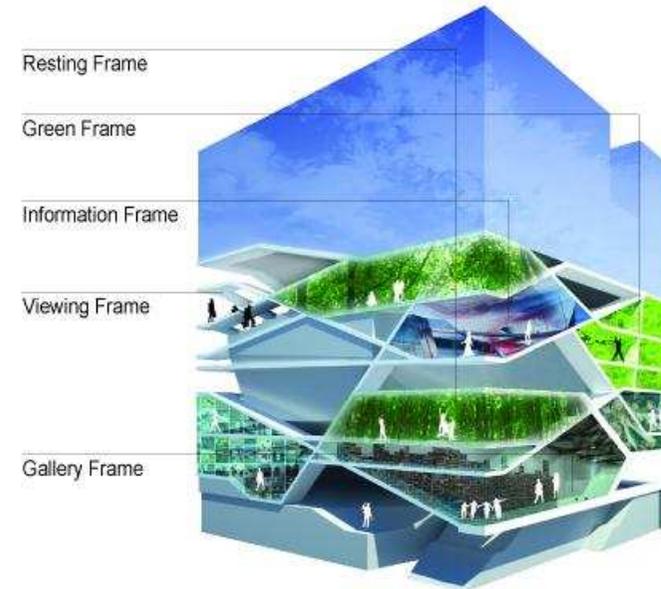
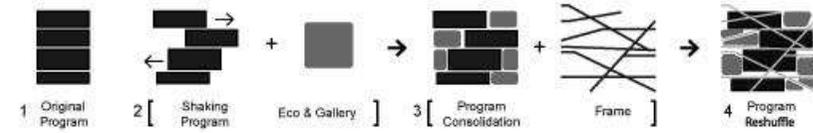


**Plants don't need earth: only water, minerals, light and carbon dioxide".
Based on this simple axiom, Patrick Blanc built his first vertical garden in
1988, specifically in La Villette in Paris.**

Future Projects



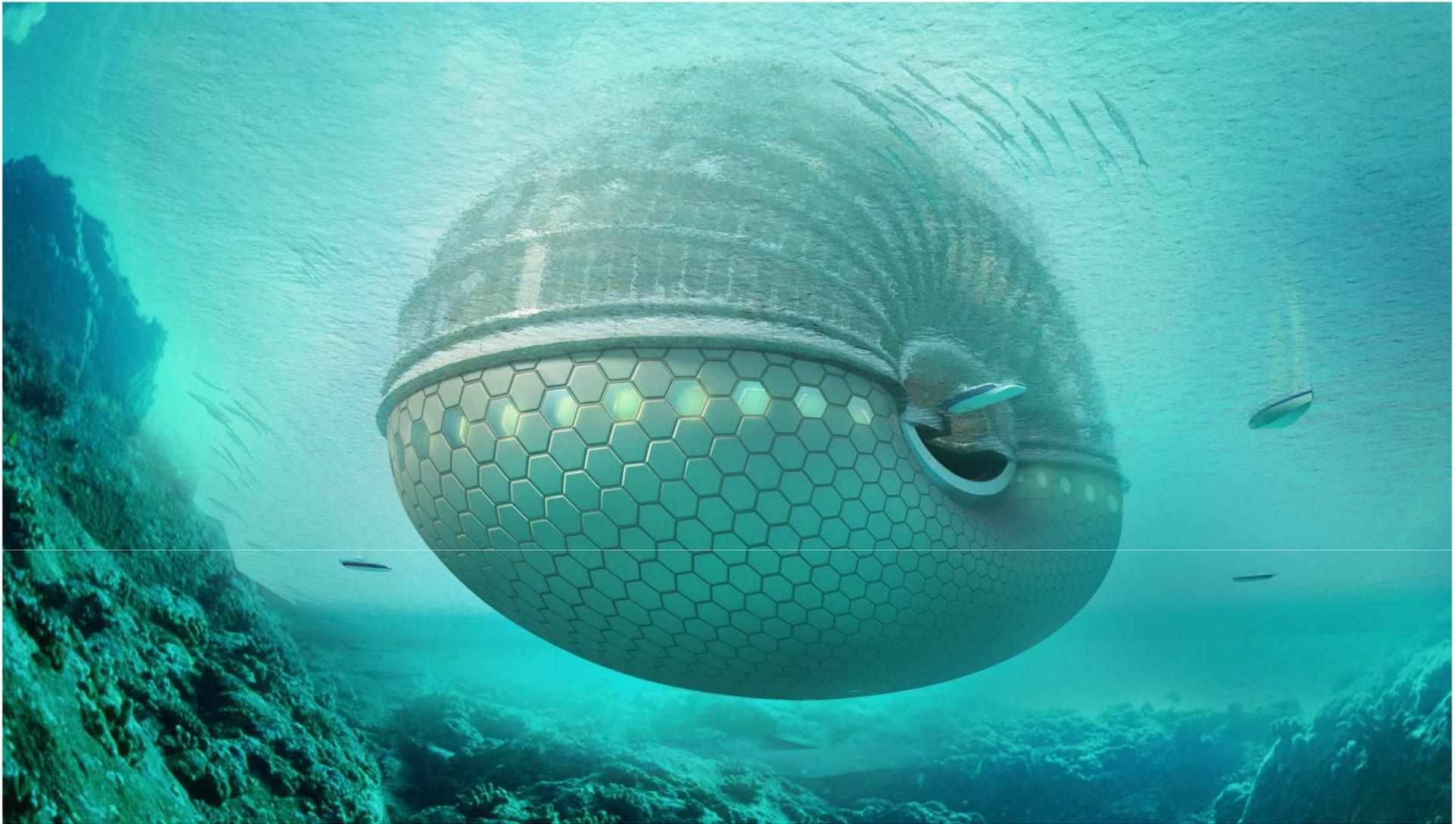
Culture Forest – Seoul, South Korea



Culture Forest – Seoul, South Korea



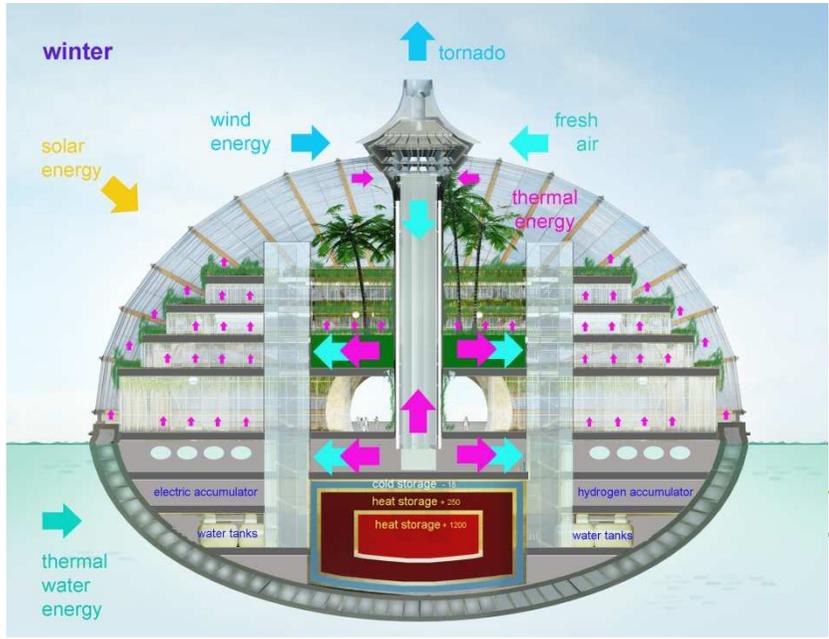
Culture & Art Center, Theater
Site Area: 1694m²



The Ark – Remistudio, Russia



-bioclimatic building with independent life-support systems that can be built on land or sea



Thank you...



<http://www.rustletheleaf.com>



www.zelenarchitektura.sk