Polski Komitet Narodowy Międzynarodowej Rady Ochrony Zabytków ICOMOS

FONDAZIONE ROMUALDO DEL BIANCO

SAPIENZA UNIVERSITÀ DI ROMA

POLITECHNIKA LUBELSKA

UNIVERSIDAD POLITÉCNICA MADRID

SAPERE AUDE VILNIUS GEDIMINAS TECHNICAL UNIVERSITY

FONDAZIONE FLAMINIA RAVENNA

Sustainable Urban Rehabilitation in Europe

Historical building adaptation to modern function

Erasmus+

Sustainable Urban Rehabilitation in Europe

3rd Semester

Susana Mora Alonso-Muñoyerro
Ignacio Mora Moreno
David García García
Carolina Hernández Martínez
Camila Burgos Vargas

Historical building adaptation to modern function

3 ECTS

SH

Sustainable Heritage

EC

Elective Courses

Erasmus+

SURE
SUSTAINABLE URBAN REHABILITATION IN EUROPE

UNIVERSIDAD POLITÉCNICA DE MADRID

Sustainable Urban Rehabilitation in Europe

Historical building adaptation to modern function

3 ECTS

SH Sustainable Heritage

EC Elective Courses

01 Introduction to building adaptation
02 Typology: big to big & small to small adaptations
03 Typology: big to small & small to big adaptations
04 Programme: extensions
05 Programme: bubbles
06 Programme: other adaptations
07 Circulations: horizontal circulations
08 Circulations: vertical circulations
09 Enclosure: protective enclosure
10 Enclosure: lightweight roofs, façades and finishings
11 Systems: climatization
12 Systems: fire protection, water supply and evacuation
13 Illumination: natural lighting
14 Illumination: artificial lighting
15 Illumination: lighting systems

Sustainable Urban Rehabilitation in Europe

Historical building adaptation to modern function

3 ECTS

LESSON 09: PROTECTIVE ENCLOSURE

Erasmus+

SURE
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THE ENCLOSURE: definition

It is clear that the fundamental cell of architecture is the use of space; the envelope is the element that defines this space. The envelope emerges as an element of delimitation of the living space, but it is not its only function.

Climatic comfort: It is a barrier or filter to control temperature, sun, wind and humidity.

Aesthetics: The envelope configures the image that the architecture offers to the exterior. It is an object with plastic and compositional capacity.

Resistance and stability: The envelope traditionally acquires bearing capacity, with vertical, horizontal and anti-seismic elements.

Acoustic comfort: the envelope can act as an attenuator of the external solonidos, as absorver of the interior noise and also as a resonance element.

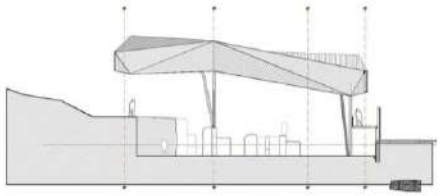
Watertightness to air and water: The openings in the design of the envelope allow natural ventilation of the spaces, since they help to distribute the air and prevent the accumulation of moisture.

Visual comfort: The vertical glass facade must connect the user with the outside environment, promoting the entry of natural light into the interior spaces.

THE ENCLOSURE

- **PROTECTIVE ENCLOSURE**
- LIGHTWEIGHT ROOFS
- FAÇADES
- INTERIOR FINISHINGS

Protective enclosures.



This section will develop some possibilities in the case of the protection of archaeological remains throughout some examples. The objective of these structures is double: to protect the findings from the weather and to enable the visit of the archaeological site to the public.

1. **The recuperation of the architectural spaces:** Villa del Casale. Piazza Armerina, Sicily.
2. **A 'new' protective architecutural space.** Plaza San Juan, Burgos, Spain. 2015
3. **The neutral 'hangar':** Roman Villa of La Olmeda. Palencia, 2000-09
4. **The light control canopy.** Arab baths of Baza. Granada, Spain.
5. **Small scale urban aproach:** Santa Eulalia's Wall Museum. Santa Eulalia, Murcia.
6. **The construction of a new building over the ruins.** Kolumba Museum. Cologne, Germany.

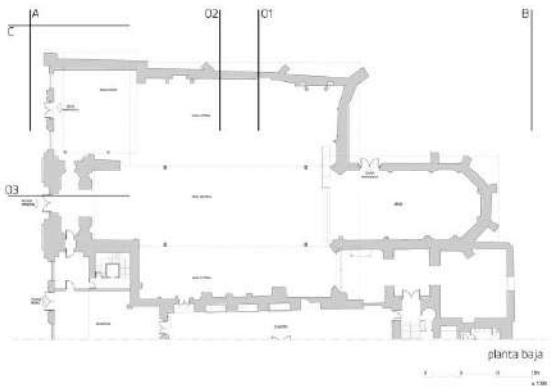
Protective enclosures 1.

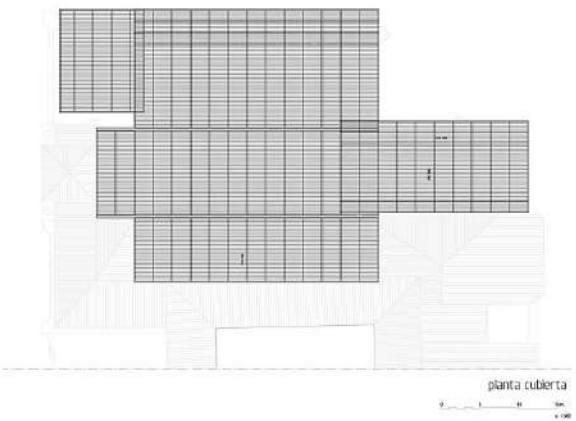
The recuperation of the architectural spaces

Protection of the roman mosaics of Villa del Casale. Piazza Armerina, Sicily.
Franco Minissi, 1958.

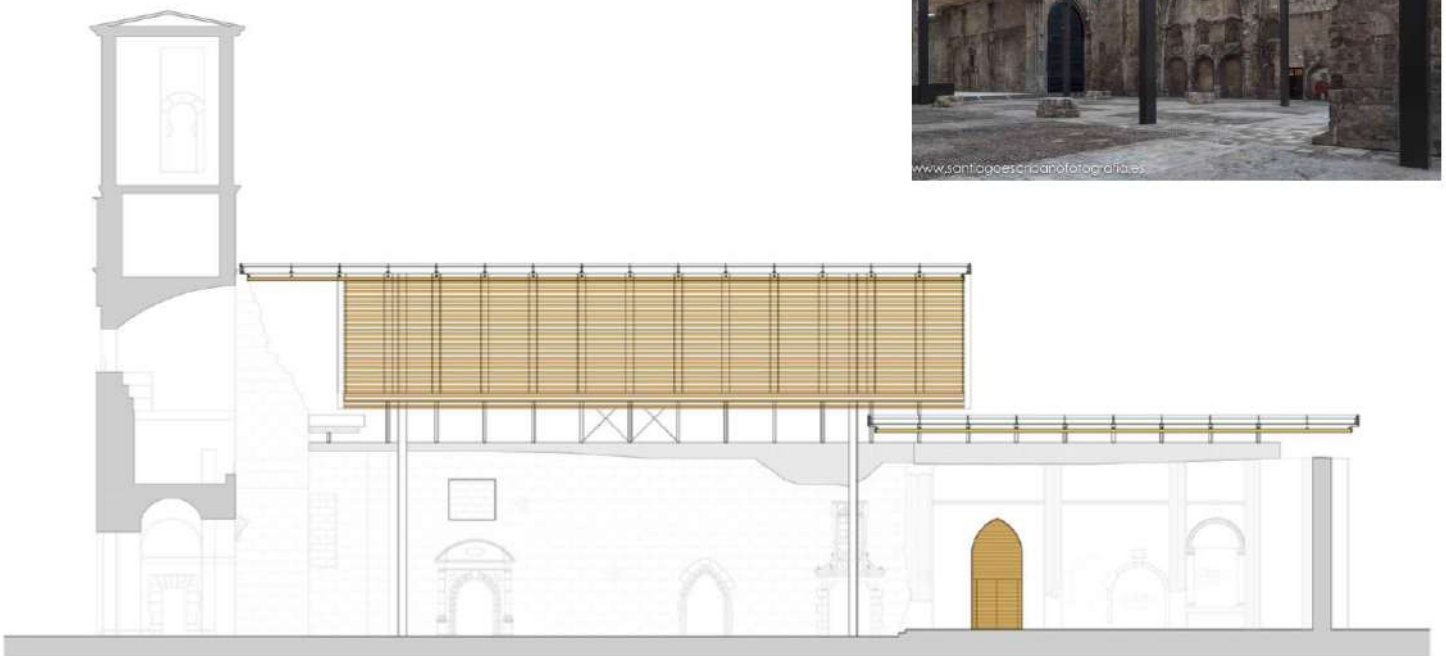
Protective enclosures 2.

A ‘new’ protective architecutural space.
Plaza San Juan, Burgos, Spain. 2015
BSA Architects.





ENCLOSURE-PROTECTIVE ENCLOSURES

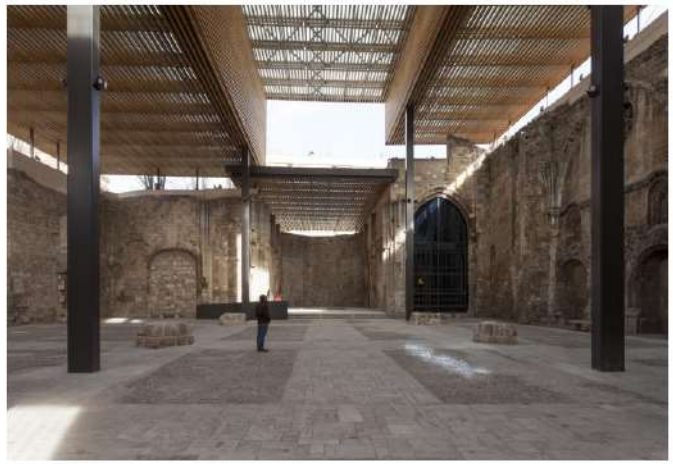


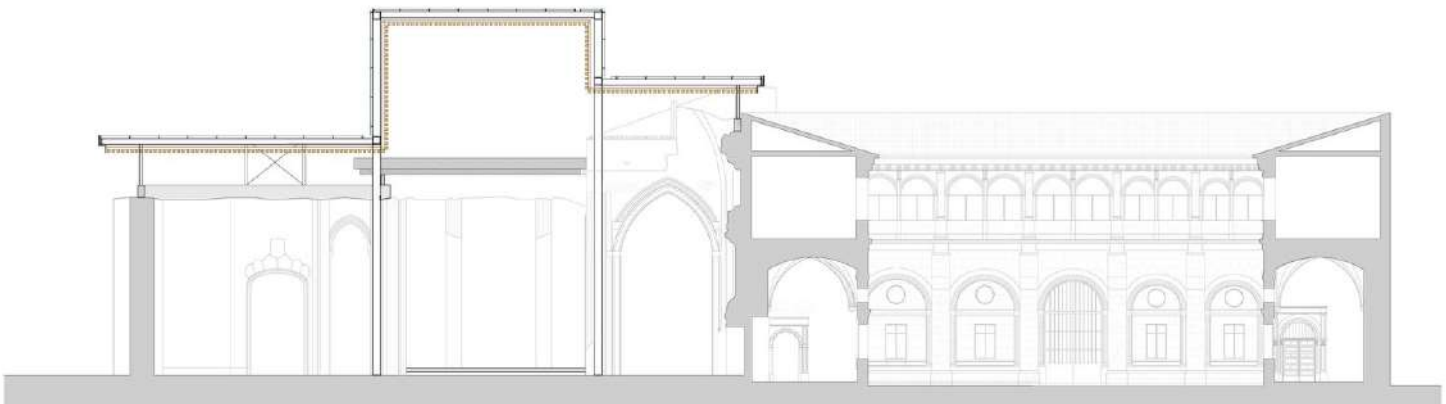
Sección 03

0 5 10 15m.

e. 1:300

ENCLOSURE-PROTECTIVE ENCLOSURES





Sección 01

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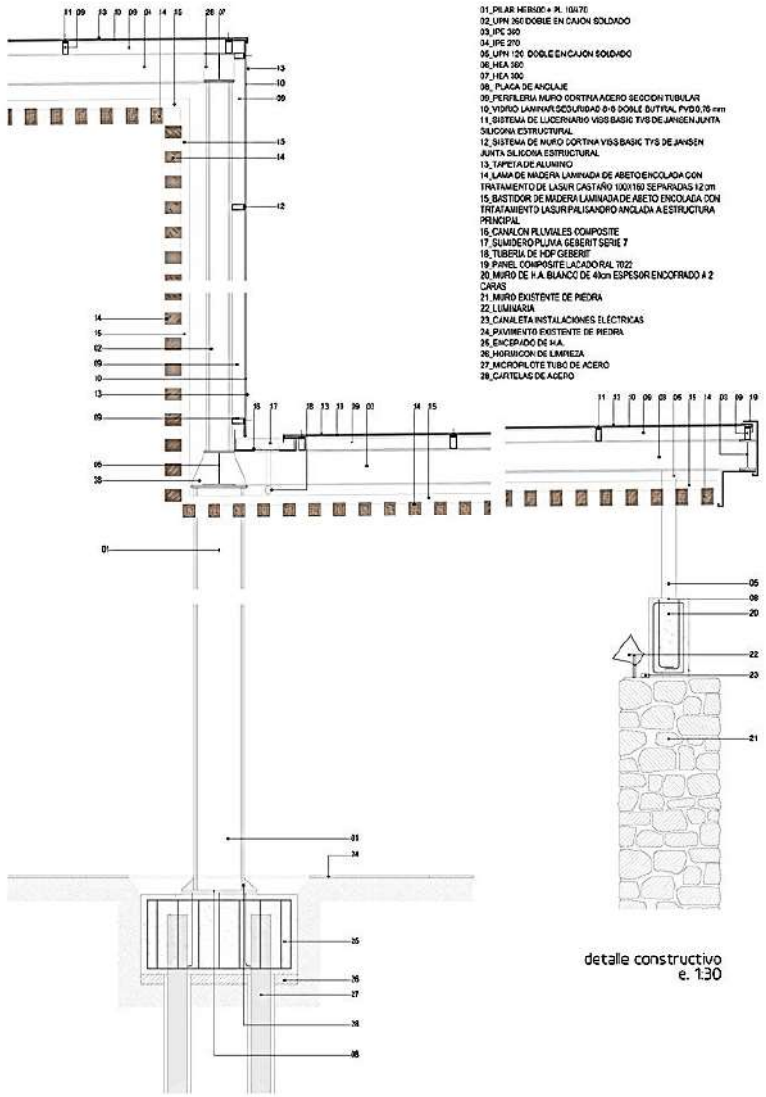
e. 1:300

ENCLOSURE-PROTECTIVE ENCLOSURES



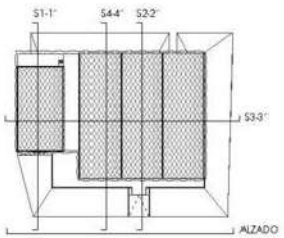
detalle constructivo
e. 1:30

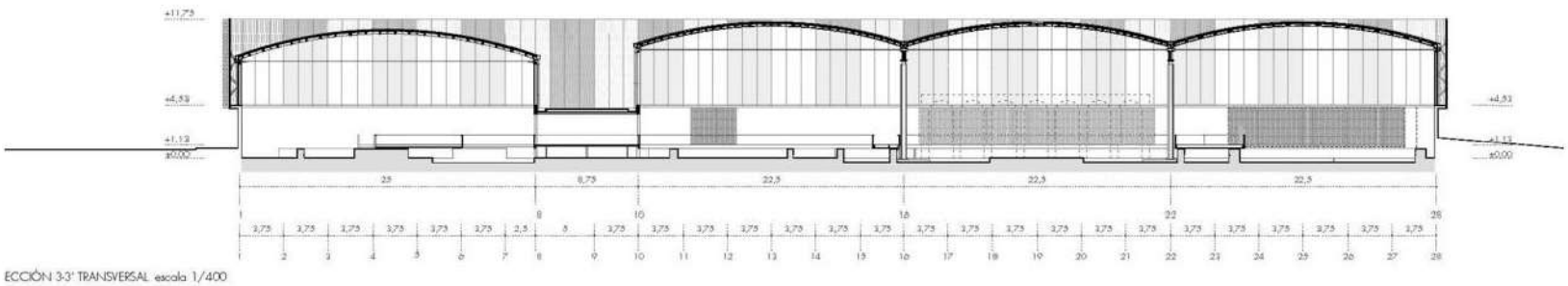
Protective enclosures 3.

The neutral 'hangar'.

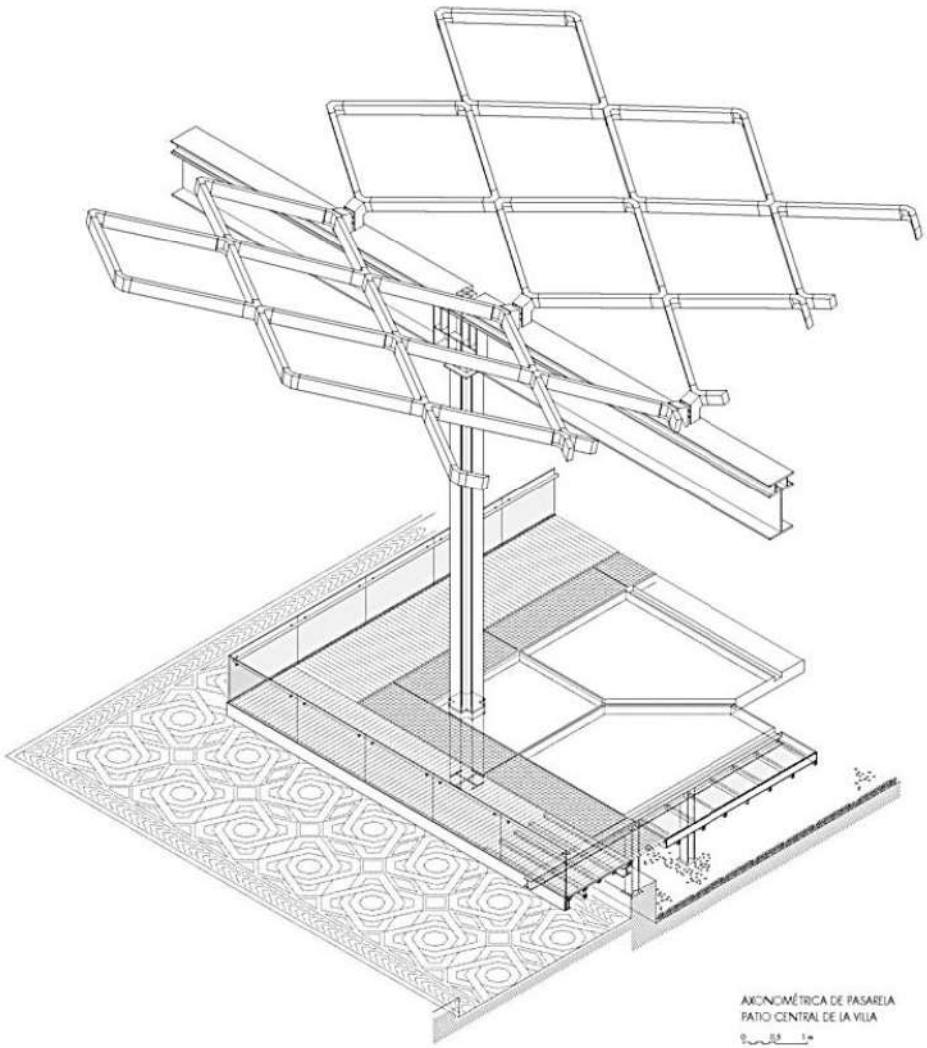
Roman Villa of La Olmeda. Palencia, 2000-09

Paredes Pedrosa Architects

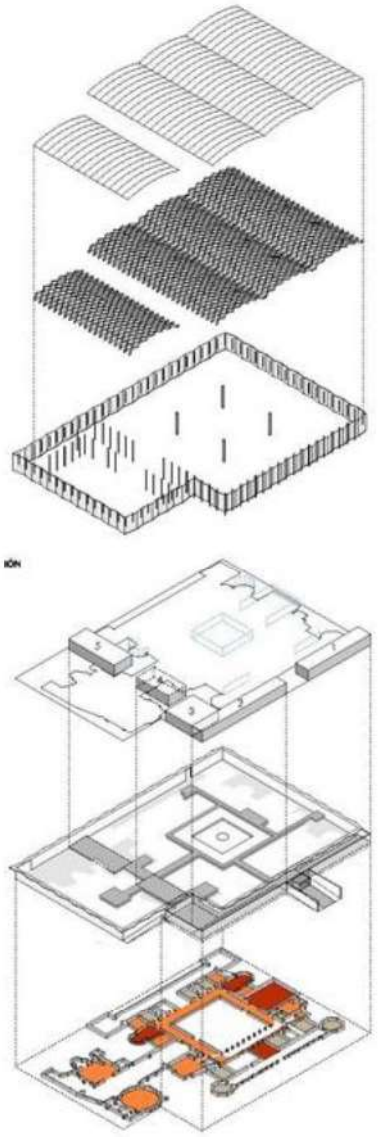




ECCIÓN 3-3' TRANSVERSAL escala 1/400



AXONOMÉTRICA DE PASARELA
PATIO CENTRAL DE LA VILLA

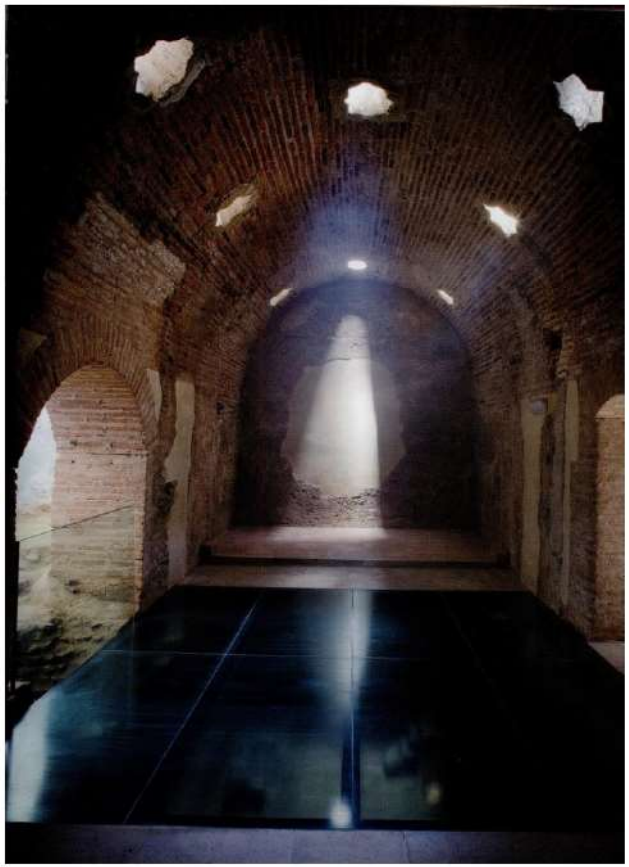


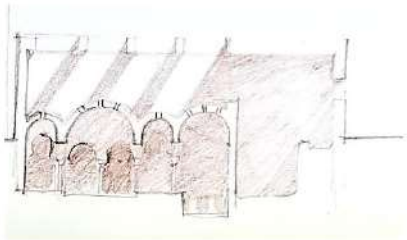
Protective enclosures 4.

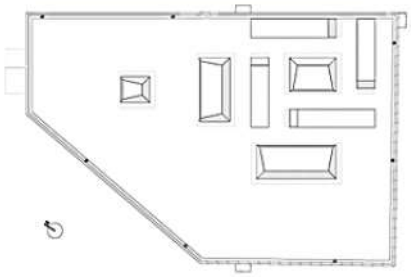
The light control canopy.

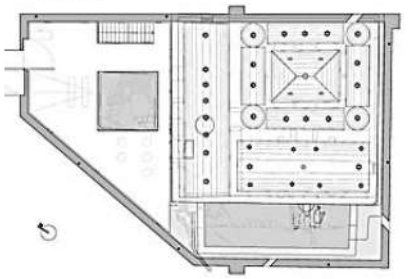
Arab baths of Baza. Granada, Spain. 2004-08

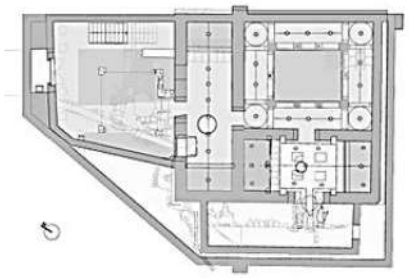
Francisco Ibáñez Sánchez



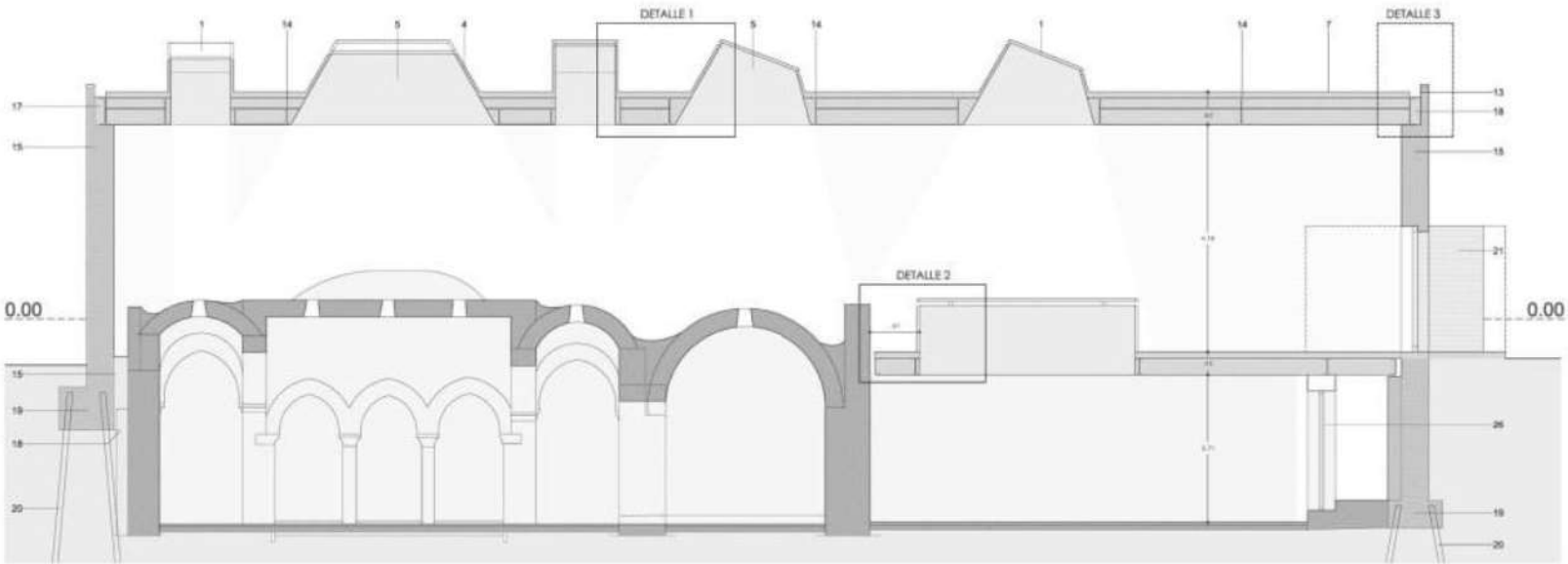








ENCLOSURE-PROTECTIVE ENCLOSURES



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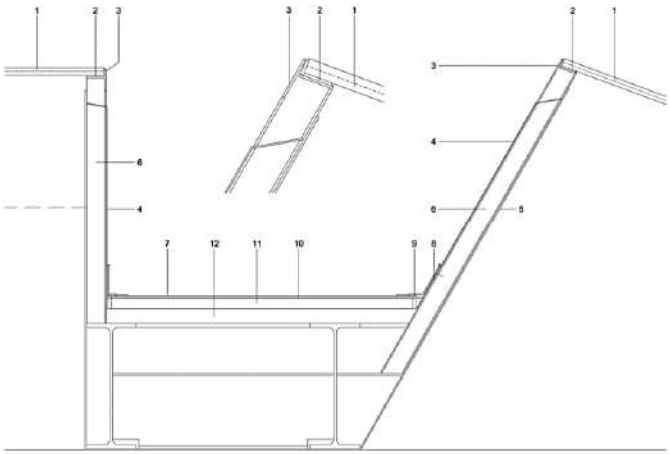
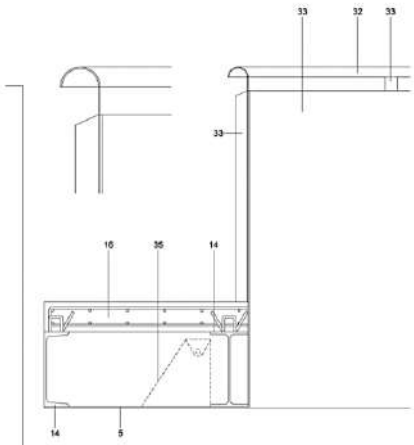


DETALLE 1 E.1/10



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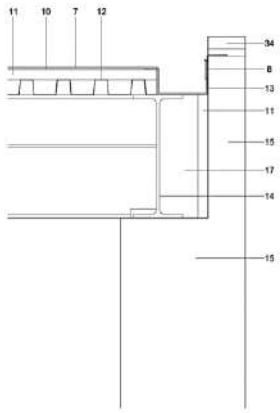
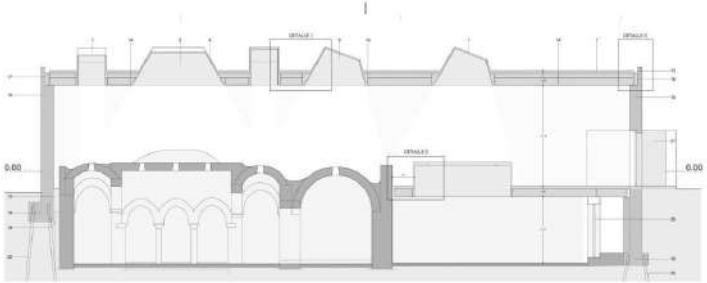


DETALLE 3 E.1/10

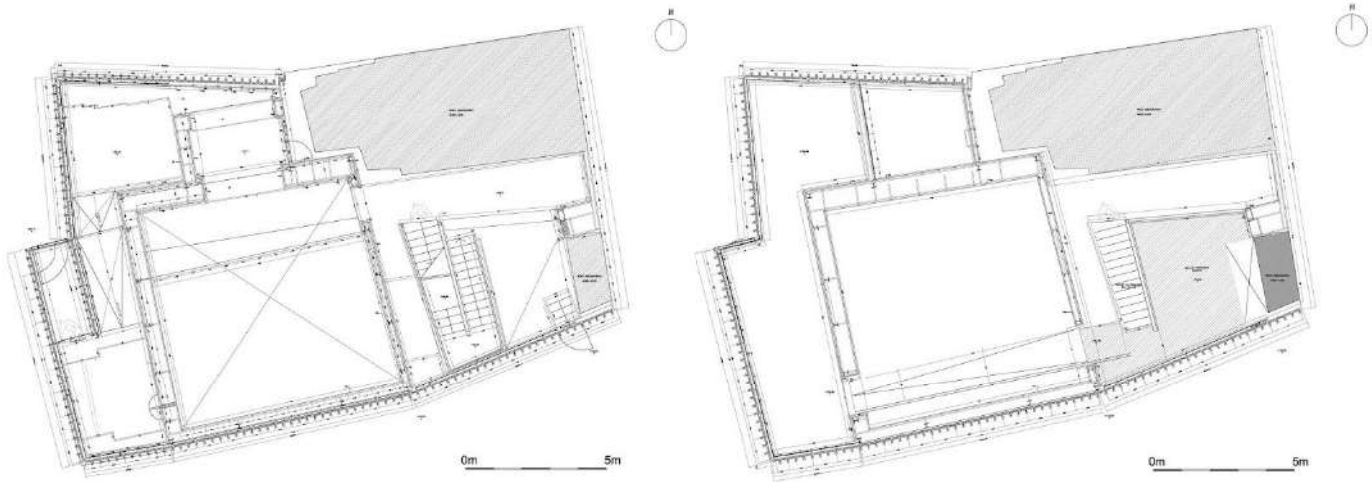


Protective enclosures 5.

Small scale urban aproach:

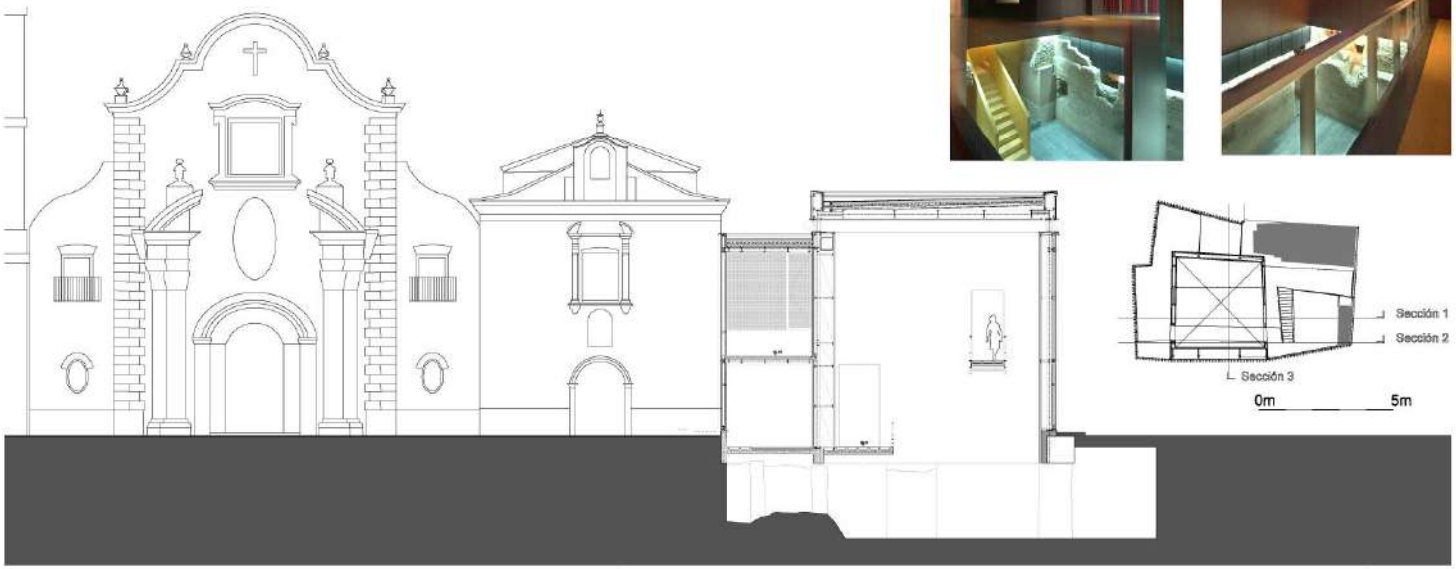
Santa Eulalia's Wall Museum. Santa Eulalia, Murcia.

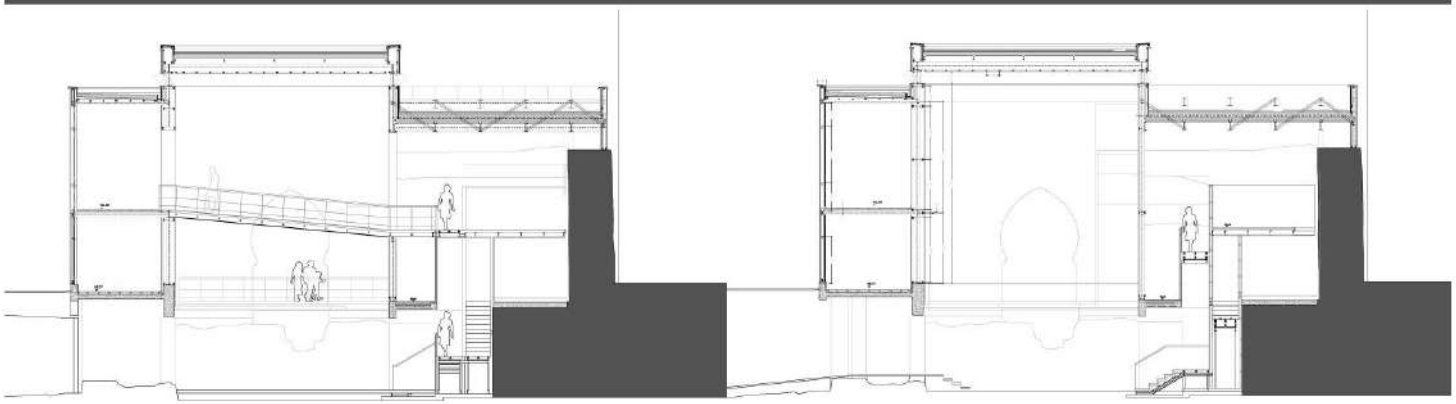
Amann, Cánovas, Maruri.



Santa Eulalia's Wall Museum, Amann, Cánovas, Maruri.

ENCLOSURE-PROTECTIVE ENCLOSURES



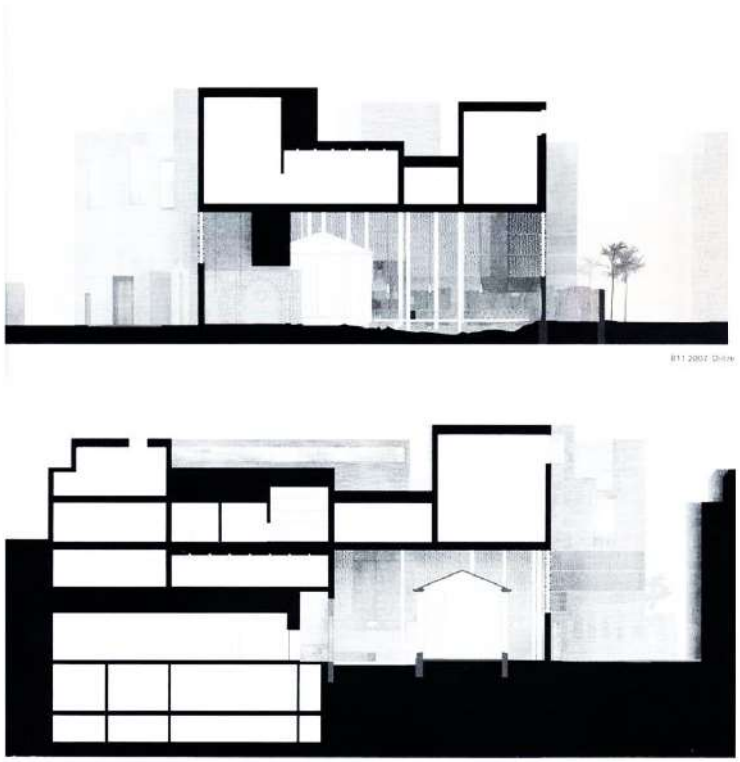


Protective enclosures 6.

The construction of a new building over the ruins.

Kolumba Museum. Cologne, Germany.

Peter Zumthor.



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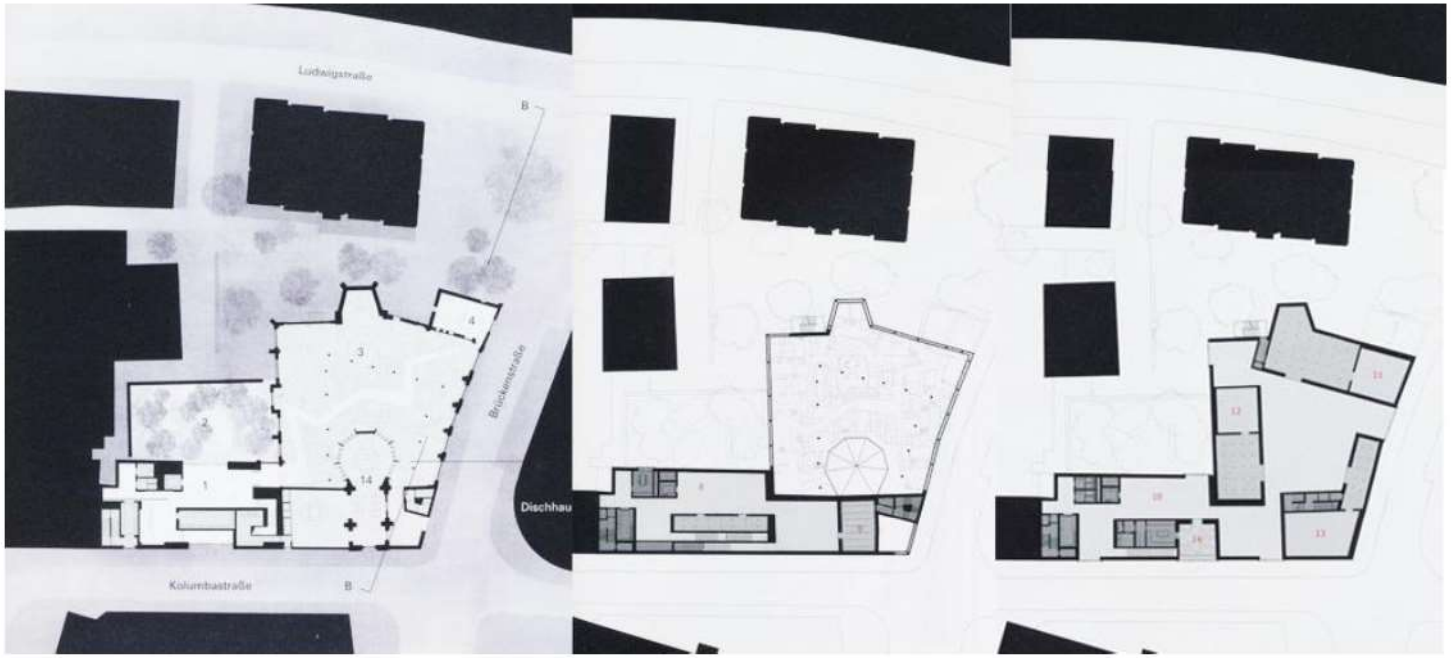

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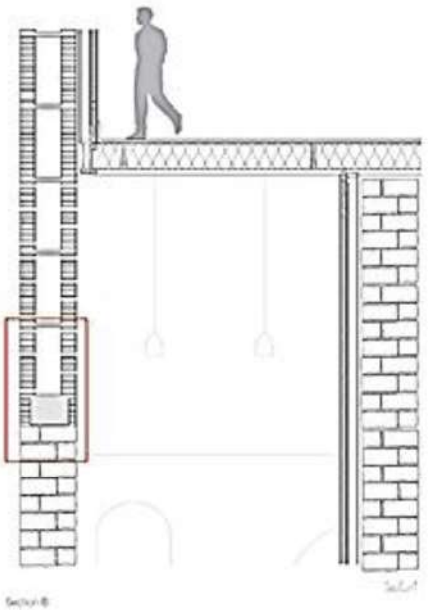

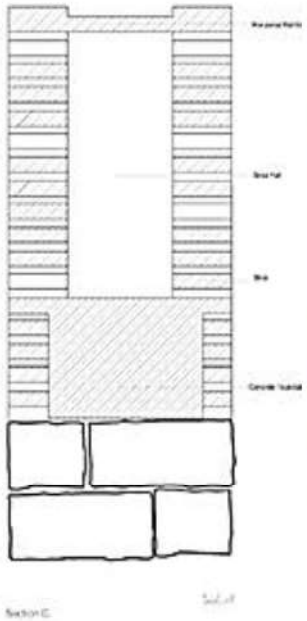

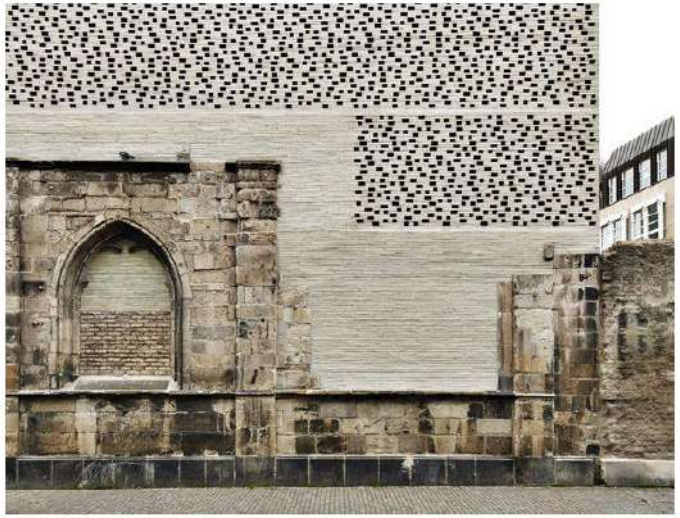

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