



VILLA ROMANA LA OLMEDA. Paredes Pedrosa Arquitectos

Competition 2000 - 2004. Project 2005. Built 2009
Location: Pedrosa de la Vega, Palencia, Spain
Client: Diputación de Palencia
Architects: Ignacio Pedrosa, Ángela García de Paredes
Project team: Clemens Eichner, Álvaro Rábano, Eva Urquijo, Andrea Franconeri, Eva M. Neila
Civil engineer: Luis Calvo Hurtado
Structural Engineer: GOGATE S.L.
Mechanical engineer: Nieves Plaza
Area: 7,130 m2
Photographer: Roland Halbe, Luis Asín
Programme: Covering of the archaeological roman area for museum use, visitors reception, book shop, auditorium for 100 seats, workshop, offices

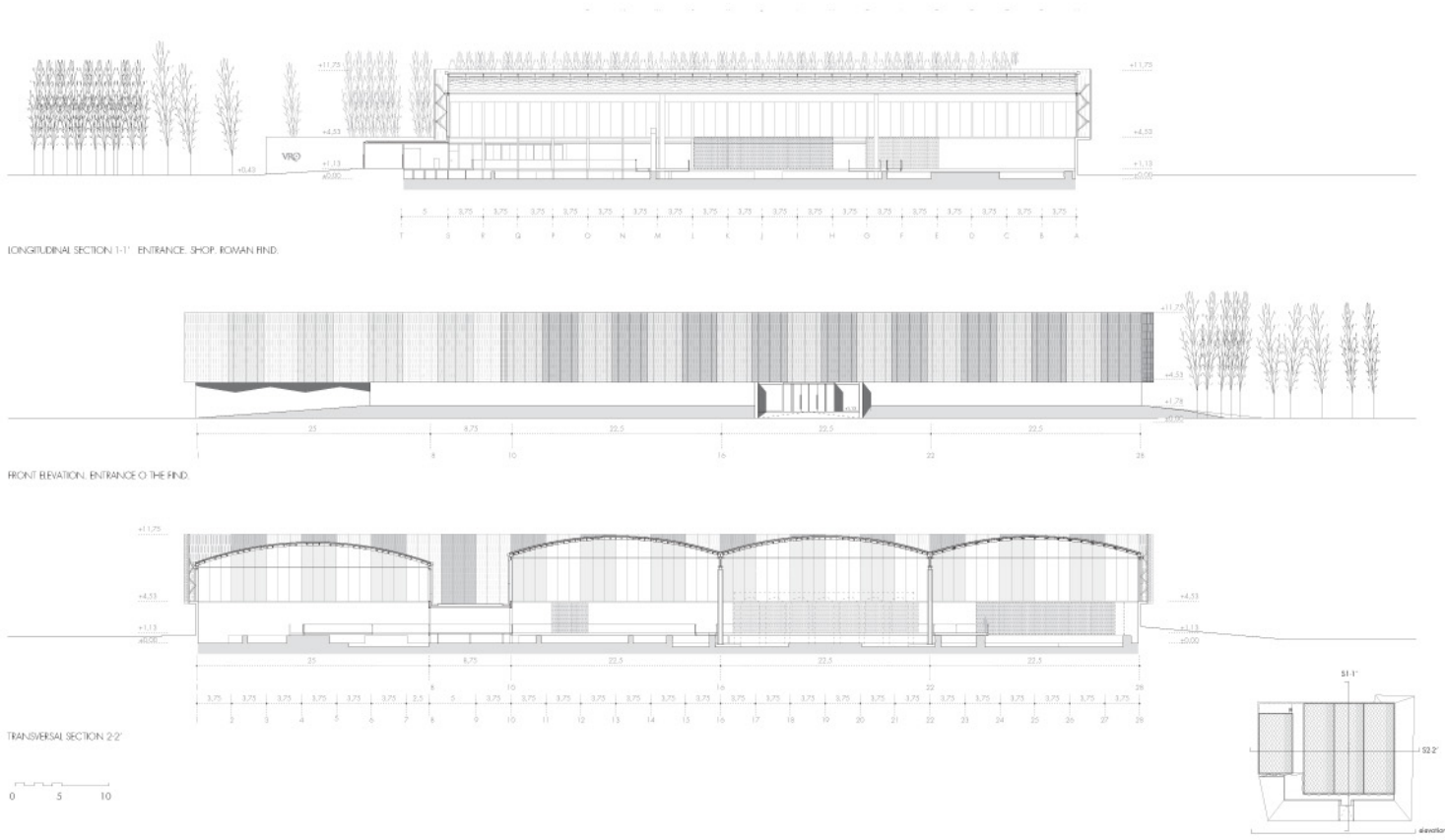
The project consists in the protection of an important archaeological find, a Roman Villa of the 4th century a.c. discovered in 1968. In this intervention archaeology is confronted to modernity, and the building is confronted to nature. The magnificent mosaics, hidden for centuries under a rural landscape, are the aim of this museum. The program includes the construction of a roof for the excavations, the exhibition of the mosaics and a study centre for archaeologists. The space of the rooms is built up with a translucent perimeter of metal mesh as a frame for the mosaics that do not interfere with the wide metallic roof that covers the area. These concepts wish to make visitors aware of the unitary character that these fragments of the past had.

The integration of new architecture in the landscape is also an aim of this project. The relation between architecture and open landscape, between the large sized building and the hidden geometry of nature required special sensibility and the building is dimensioned regarding the scale of the nearby groups of poplars.

The extensive occupation of the site and the need to avoid altering it during the construction work, in addition to its location in a rural environment, recommended the use of a prefabricated modular system. The dimensions of the rhomboidal elements ease their transportation and facilitate the on-site assembly of full arches that, with twenty-five meter spans, were raised to their final position and fixed with screws.

The translucent facade in polycarbonate provides homogenous lighting to the interior. A raised floor made of wooden slats with transparent railings joins all the archaeological zones. The outline of the itinerary gets narrow and expands depending on the width of the mosaics to be observed, with a disposition thought for an open display. From the roof hang a series of steel meshes that restore the position of the villa's original walls, favouring the views of the mosaics in differentiated ambits and showing the villa's original layout.

Sustainability is achieved by the own concept of the building. Cost was tight and both structure and construction are finishing's and conditioning. Conditioned areas are only 35% of the total volume. The main air volume of the villa is shaded from the intense summer sun by the double perforated facade that filters light as tree leaves and branches do. And so artificial light is reduced to the essential above the mosaics and public facilities. The corten steel free-standing panels bear the patina of time and permit a natural maintenance of polycarbonate facade and roof. Two ventilated layers that isolate the non air-conditioned interior towards the extreme continental temperatures, compose vaults. Finally water from rain and snow on the large area of the roof, is conducted to the perimeter to the green slope that embraces the building and to the central patio, where the ancient roman pipes eighteen centuries later work again.



Curriculum Vitae

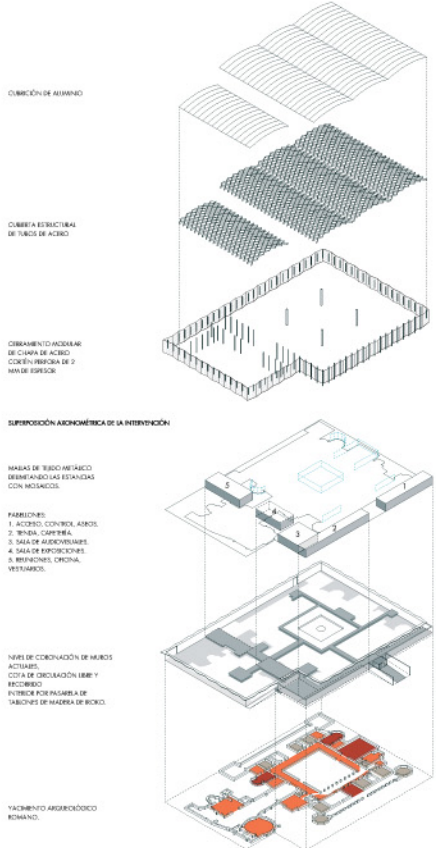
Ángela García de Paredes (Madrid 1958) and Ignacio Pedrosa (Madrid 1957) graduated at the ETSAM where they are architectural design professors.

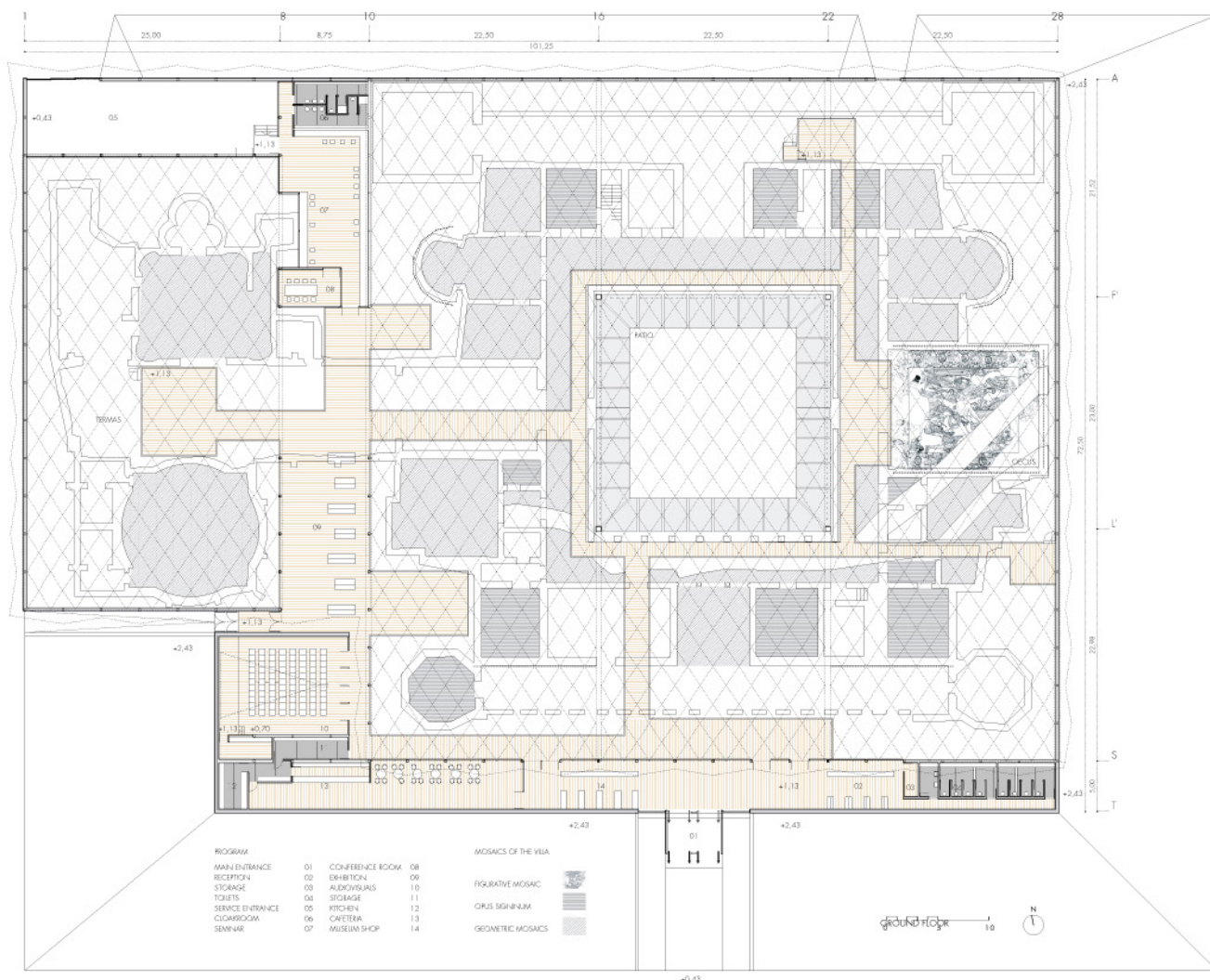
They establish the architectural office PAREDES PEDROSA in 1990, dedicated to competitions, and project and urban design mainly for public buildings related to cultural equipment.

They are visiting professors in Barcelona UIC, Valencia and Navarra Universities. They have been critics at several universities: GSD Harvard, ETH Zurich, Mendrisio and Louanne and lecturers in other universities as Sao Paulo, Oslo, Münster, New York CU, FADU Buenos Aires, Monterrey, Milano Polytechnic, San Juan in Puerto Rico and TU München.

Paredes Pedrosa won competitions include: Visigoth Museum in Mérida, Joan City of Justice, Lago Auditorium, Public libraries in Madrid, Córdoba and Ceuta, Social housing in Madrid*, Paliscola Congress Centre*, Almería Archaeology Museum*, Torner Museum in Cuernavaca, Olympia Theatre in Madrid*, EUROPA N 4, Borghetto Planisio in Rome, Pla for Murcia University, Town Hall in Valdemarquesa*, EUROPA N 2.

Paredes Pedrosa built work* has been awarded with the Spanish Architecture award 2007, Madrid Architecture award, COAM award, Murcia Architecture award, ASCER award, ARCO award, Europa Nostra award, Asiprta award and has been nominated for exhibitions in Hannover, Cologne, AEDS Berlin, Aichi Japan, FAD Barcelona, RIBA London, and in four Spanish Architecture Biennales, BIAU in Medellín and Lisboa, Venice Biennale, and Sao Paulo Biennale.





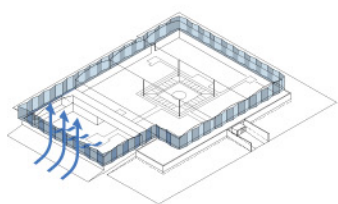
Il progetto consiste nella protezione di un'importante area archeologica, una villa romana databile dal IV secolo D.C. e scoperta in 1968. In questo intervento si mettono a confronto una parte archeologica e modernità, e dall'altra architettura e natura. Proteggere gli straordinari mosaici, nascosti per secoli sotto un paesaggio rurale, costituisce lo scopo del museo. Il programma include la costruzione di una copertura sopra gli scavi, l'esposizione dei mosaici e un centro di studi archeologici. Le sale sono circondate da un perimetro traslucido in maglia metallica che serve di cornice per i mosaici e non interferisce con il tetto metallico. Questi concetti vogliono rendere i visitatori coscienti del carattere unitario che questi frammenti avevano nel passato.

L'integrazione del nuovo museo nel paesaggio è anche tra gli scopi del progetto. La relazione tra architettura e ambiente aperto, tra l'ampia costruzione e la geometria naturale nascosta demandano una sensibilità speciale. Così l'edificio si dimensiona integrandosi armoniosamente nel paesaggio di pioppeti circostanti.

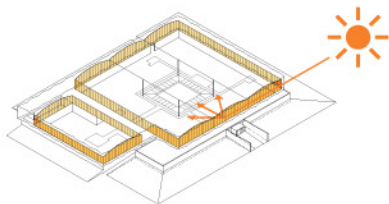
La localizzazione rurale, l'ampia estensione del sito e la necessità di non alterarlo durante i lavori hanno suggerito l'utilizzo di un sistema costruttivo modulare. La dimensione degli elementi romboidali ha agevolato il trasporto e il montaggio sul posto di archi di venticinque metri di luce che sono stati alzati e fissati con viti.

La facciata di polycarbonate traslucido proporziona un'illuminazione interiore omogenea. Un pavimento sopraelevato a stecche di legno con ringhiere trasparenti unisce tutte le aree archeologiche. Il percorso si stringe o allarga secondo la larghezza dei mosaici in osservazione. La disposizione è concepita per una mostra aperta? Grazie a una serie di maglie metalliche appese dal soffitto si delimitano i diversi ambienti e si favorisce l'osservazione dei mosaici, recuperando la spazialità originaria della villa.

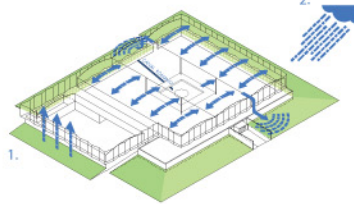
La sostenibilità si ottiene per la propria concezione dell'edificio. Il costo è stato basso e la propria struttura e costruzione servono come elementi di finitura e di climatizzazione. Le aree climatizzate occupano solo il 35% del volume totale. Il volume d'aria sopra il giacimento è protetto dall'intenso sole di estate grazie alla doppia facciata perforata che filtra la luce come le foglie degli alberi. L'illuminazione artificiale si riduce al massimo nelle aree pubbliche. I pannelli d'acciaio corten sviluppano una patina col passo del tempo e permettono una manutenzione naturale della facciata di polycarbonate e la copertura. Questa copertura è composta da due strati ventilati che isolano l'interno di forma naturale contro le temperature estreme esteriori. Finalmente, l'acqua di pioggia e neve che cade sopra l'ampia copertura è condotta oppure al perimetro, verso dei pendii verdi che circondano l'edificio, oppure verso il cortile centrale, dove le vecchie tubature romane funzionano di nuovo, dopo diciotto secoli di storia.



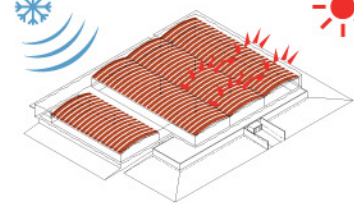
CLIMATIC BUFFER
OUTER PERFORATED STEEL PANELS FACADE
- SHADING
- CHIMNEY EFFECT
- MINIMUM MAINTENANCE OF AUTO PROTECTED CORTEN STEEL



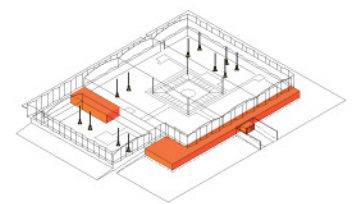
NATURAL LIGHTING CONTROL
TRANSLUCENT INNER FACADE
- FILTERS AND EQUALIZES SUN LIGHT



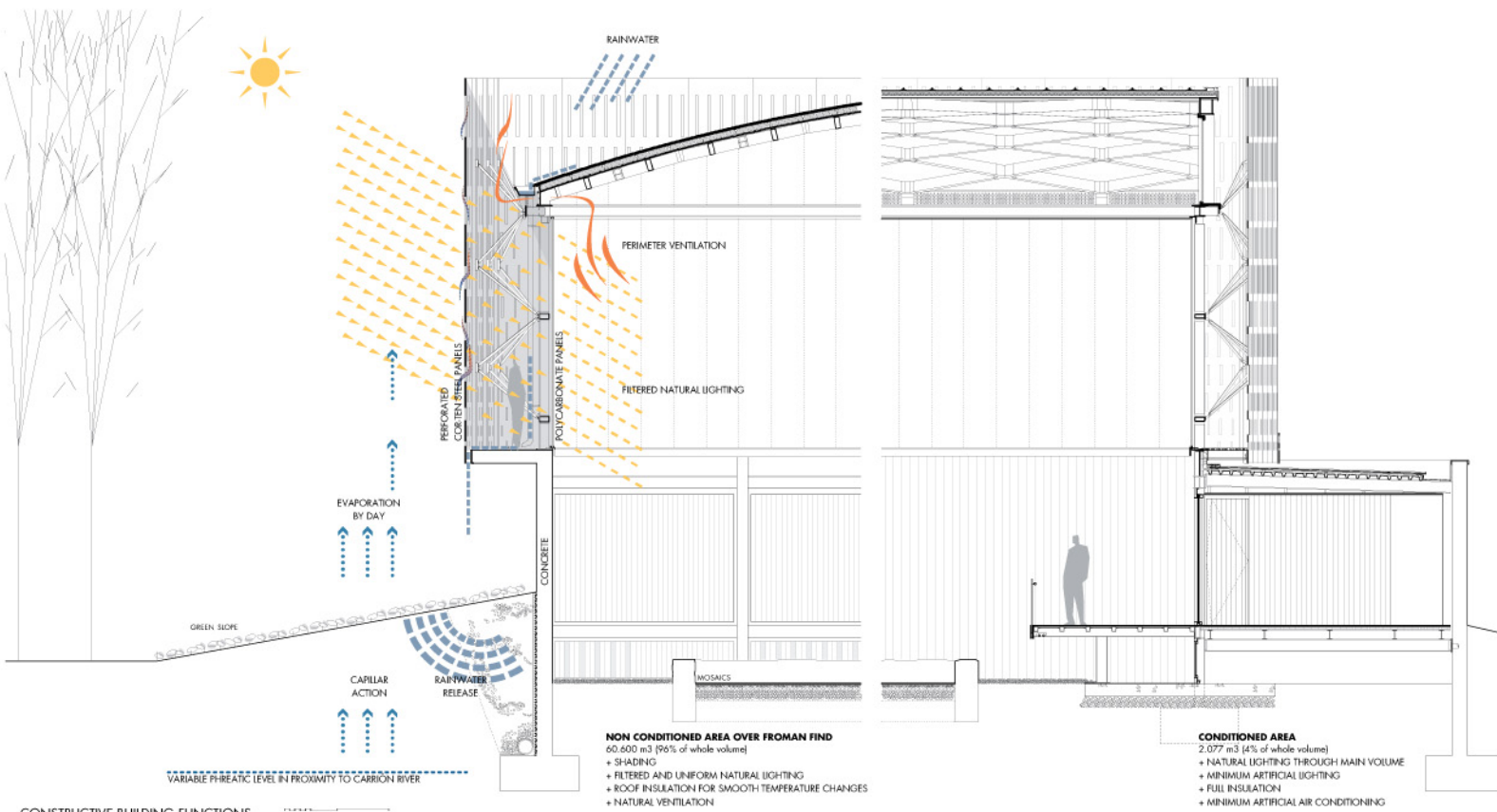
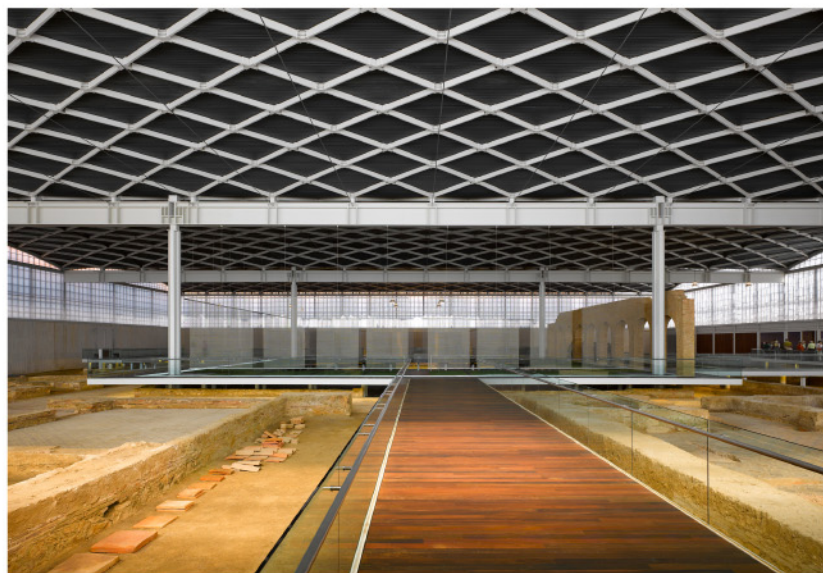
WATER BALANCE
GREEN SLOPES WITH TWO MAIN FUNCTIONS
- WATER MICROCLIMATE IN THE PROXIMITIES
- RAINWATER RELEASE TO NATURAL CYCLE
REDUCES IMPACT TO GROUNDWATER LEVEL



IRRADIATION CONTROL
INSULATED DOUBLE ROOFING
- PROTECT FINDINGS FROM EXTREME TEMPERATURE VARIATION
[MEDIUM TEMPERATURE AMPLITUDE: AUGUST: +34,5°C to +6,8°C]
[MEDIUM TEMPERATURE AMPLITUDE: JANUARY: +14,5°C to -6,9°C]
* INM 1997/2008



MINIMUM CONDITIONING
BUILT VOLUME: 63.800 m³ (96%)
CONDITIONED VOLUME: 2.077 m³ (4%)
- MINIMUM ARTIFICIAL LIGHTING



BUILDING DATA:

Total area:	7.130 m ²	
Built area:	7.040 m ²	
Conditioned area:	764 m ²	11%
Arch covered area:	6.083 m ²	85% (=rolinding)
max. span:	25 m	
Visitors walkway area:	974 m ²	
Visitors attention area:	528 m ²	
Internal areas:	430 m ²	

VOLUME

over finding:	60.600 m ³	
conditioned:	2.077 m ³	4%
total:	62.677 m ³	96%

ROMAN FIND

Roman villa (outline):	4.479 m ²
Roman villa:	3.910 m ²
Roman mosaic work:	1.648 m ²

