

# PARABOX

Architect\_TomDavid Architecten Location\_Cardiff, UK

Adding the programmatic and safety requirements needed for a public theater, the competition stands for a particularly interesting and topical defiance: How can the sustainability of a temporary structure being justified? To meet the durability, safety and feasibility requirements, the designers use a balanced mix of materials and their application and the designers make sure that all used

파라 박스 이 공모전은 공공 극장에 필요한 프로그램 및 안전 요건들 외에도, 더욱처럼 특별히 흥미로운 도발적 주제를 제기한다. 가설구조물의 지속 가능성을 어떻게 정당화할 수 있는가? 내구성과 안전성, 타당성 요건들을 충족하기 위해 설계자들은 재료들을 균형 있게 혼합하여 적용함으로써, 사용

materials will have a long lifecycle. Either by rent, recycle or providing a second life after the show. Besides the sustainability issue, the theater just as well must comply to the universal theater standards. Therefore the design is based on the most ideal conditions for a flexible theater: a square flat floor stage area with an adequate clear height. Dry sound acoustics, ventilation, natural light

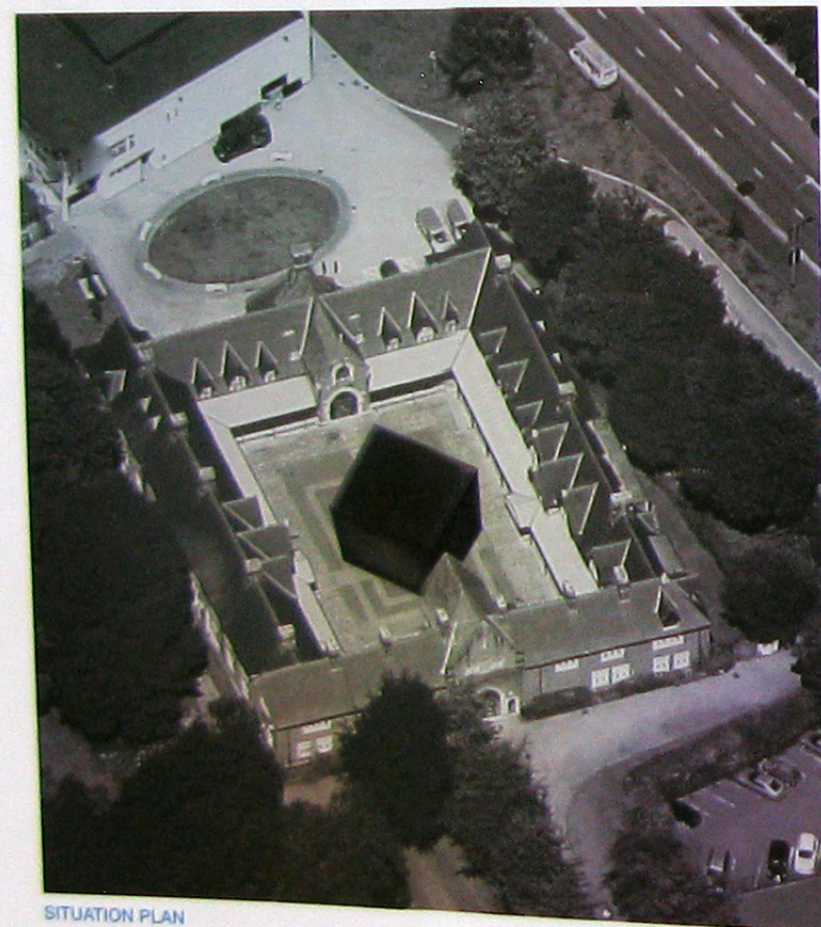
되는 모든 재료들의 오랜 수명주기를 확보하고자 한다. 임대나 재활용, 혹은 전시 후 제 2의 용도 제공과 같은 지속 가능성의 이슈 외에도, 극장 자체는 보편적인 극장 기준을 따라야 한다. 따라서 그 디자인은 가변적인 극장에 가장 이상적인 조건들, 말하자면 적절한 높이의 정사각형 평판 무대, 울림을 줄인

and the ability to darken the theater. The arrangement of the linkable seats is flexible and so a large number of conceivable configurations for both the stage and the spectators are possible. Written by TomDavid Architecten

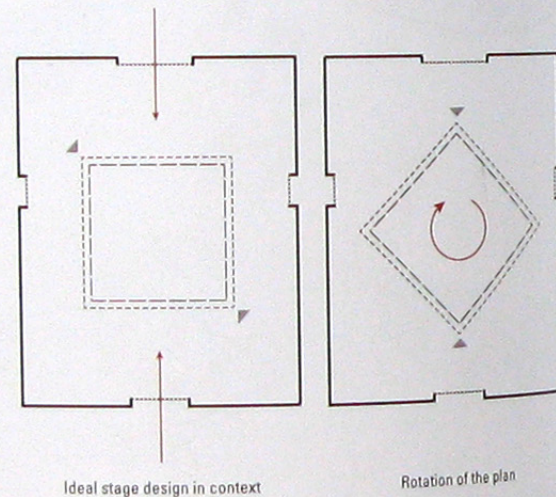
Use Cultural Total area 177m<sup>2</sup> Design team Tom van Oolij, David Baars, Alexine Sammut

음향설계, 환기, 자연광, 그리고 극장을 어둡게 하는 능력 등에 기초한다. 서로 연결이 가능한 좌석 배열은 가변적인 만큼 무대와 관객석의 수많은 구성들을 생각해볼 수 있다.

글: 톰 데이비드 아키텍트

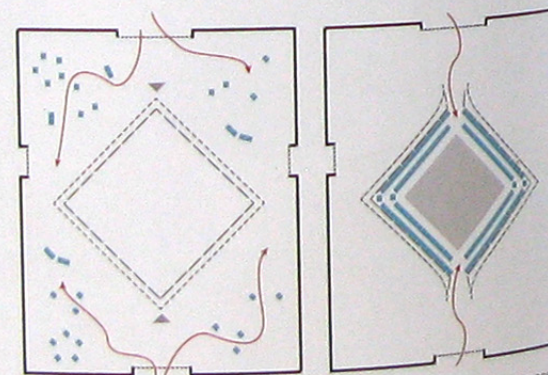


SITUATION PLAN



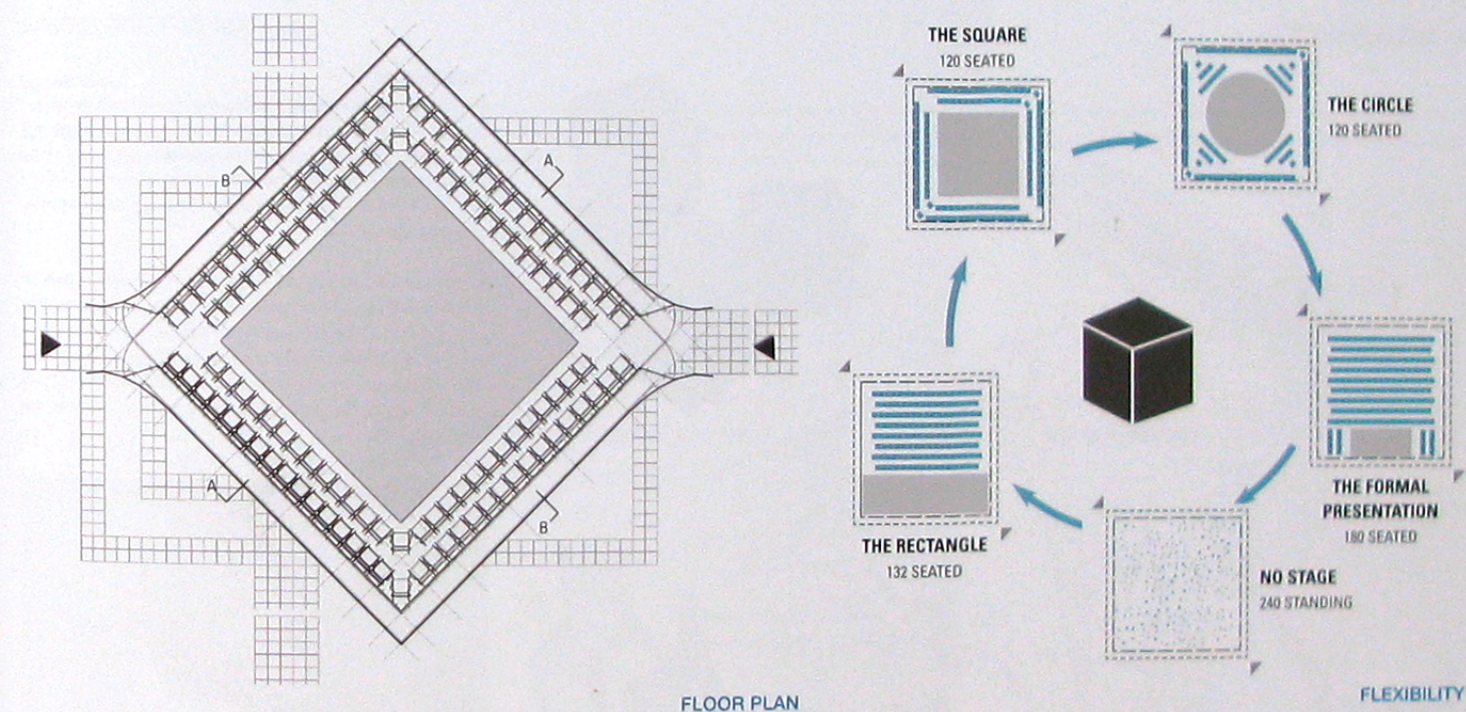
Ideal stage design in context

Rotation of the plan



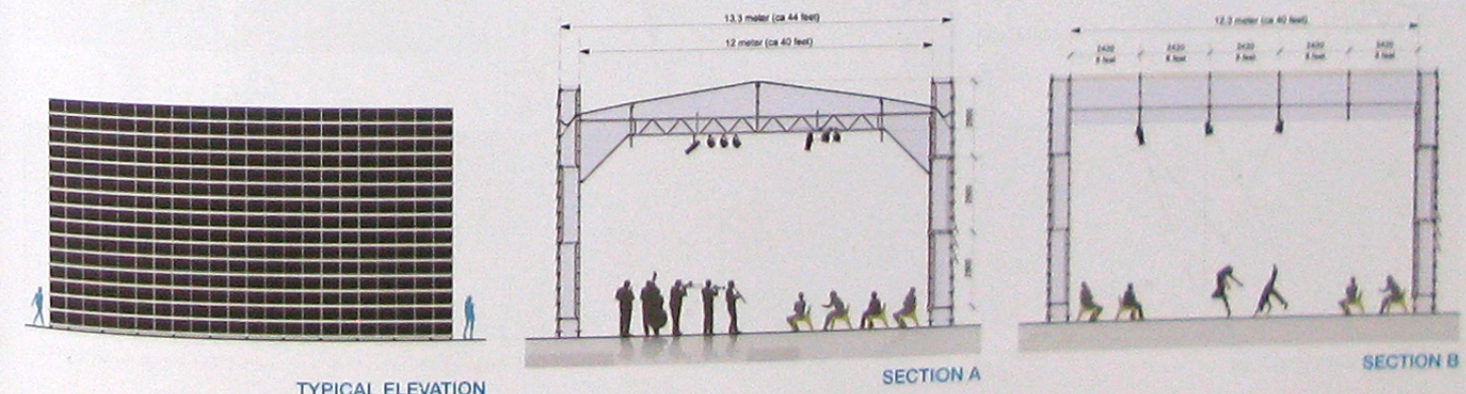
Increased functionality of the courtyard

Strategic positioning of the entrances



FLOOR PLAN

FLEXIBILITY



TYPICAL ELEVATION

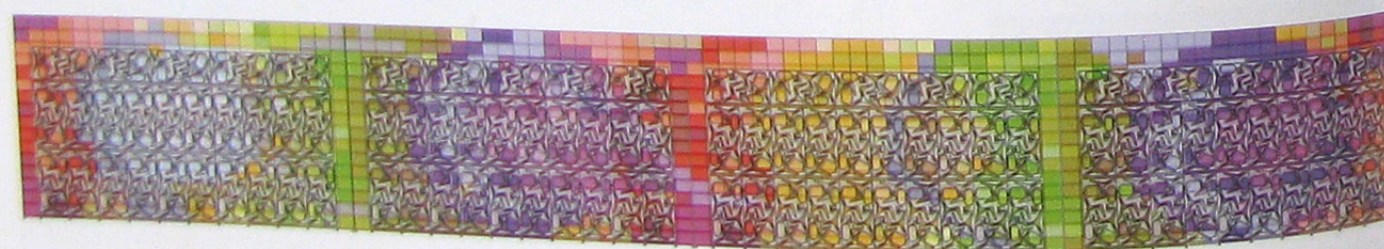
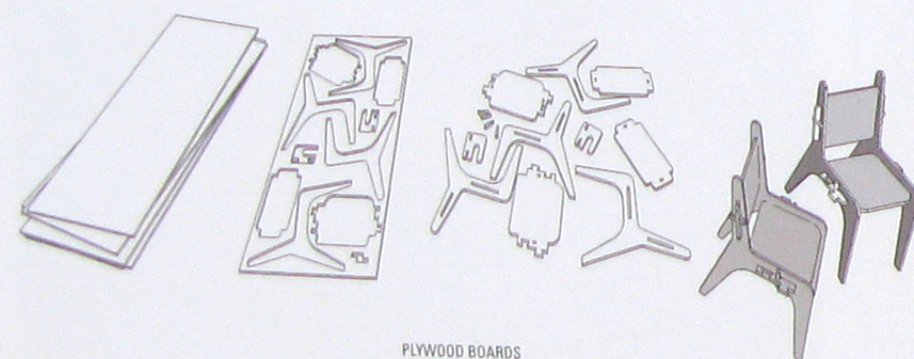
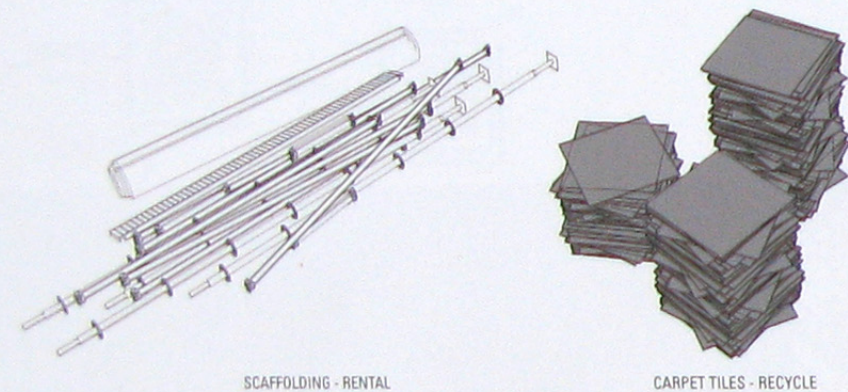
SECTION A

SECTION B





## >> SUSTAINABILITY



UNFOLDED INSIDE WALLS

## Sustainability

The life cycle of the rental scaffolding, used for the basic structure, is properly long and therefore undisputed sustainable. The carpet tiles used for the facade cladding will be collected from vacant offices around town or interior projects where they have been replaced by a new floor. These tiles are fully recyclable, so after the show they will be converted into new ones.

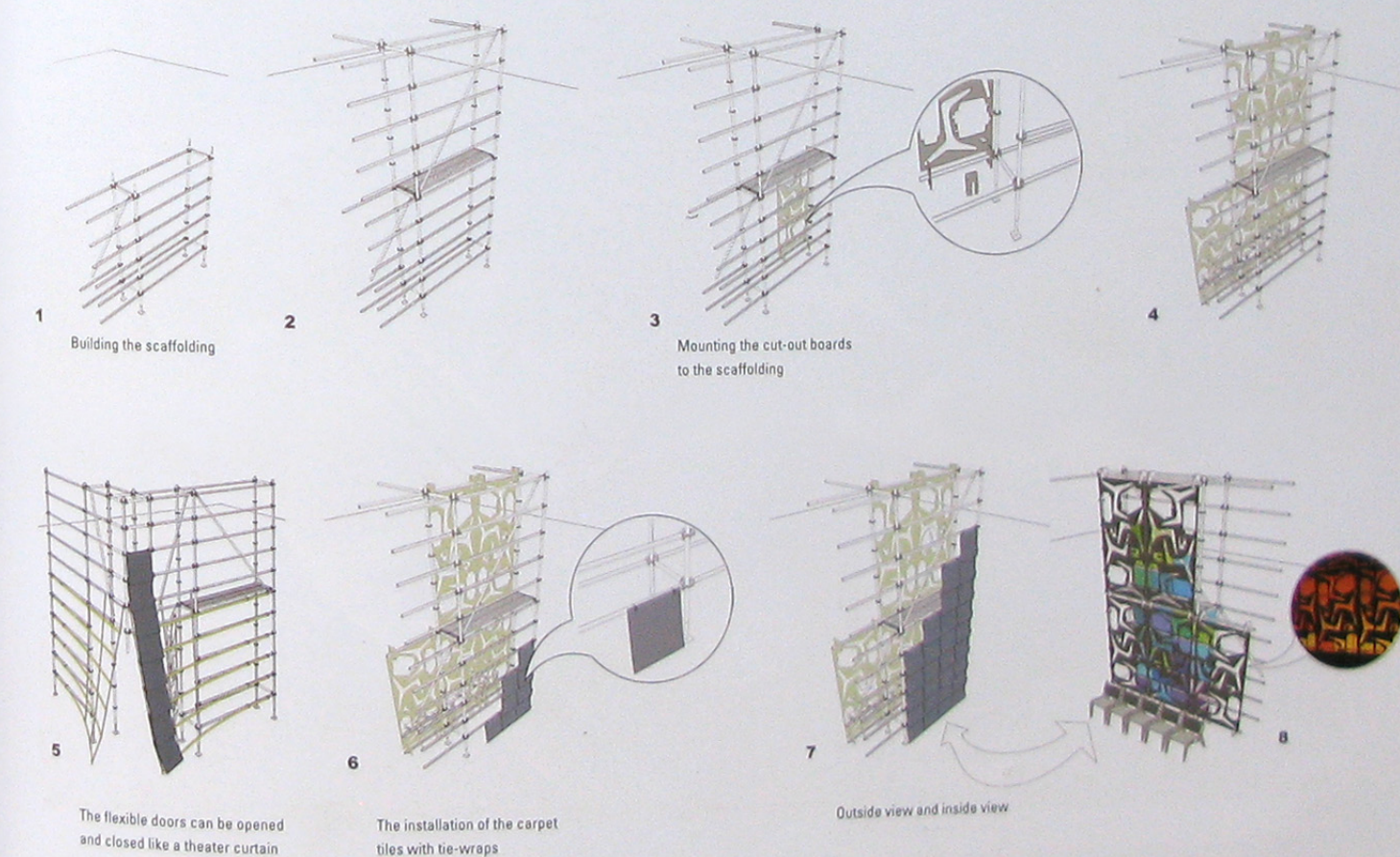
To provide all the seats for the theater we will manufacture them out of multiplex boards. The leftovers will be used to construct the inner wall. The utility of the chairs will have a sequel as they will be sold after the festival, retrospective crowdsourcing? Or will be given away. By providing a tangible memory of the Cardiff WSD 2013 Festival to its visitors, finally also the multiplex chairs are assigned to a longer and durable life cycle.



## >> CONSTRUCTION MANUAL

### Construction

The outer facade cladding, constructed out of the back side of the carpet tiles, works like snake scales. Protected from rain due to its water-repellent coating, and open enough to breathe, natural ventilation. The soft and colored side of the carpet tile directed to the inner side of the theater ensures good acoustics and a vivid background for the inner wall. The interior facade is constructed from the leftovers / cut-out boards where all the chairs are produced from. The perforated inner wall in combination with the soft side colorful outer wall provides an excellent acoustics and an easy, festive atmosphere.





Circle

# MEMORY POD

Architect\_TomDavid Architecten Location\_Unspecific

The iconic Memory Pod is a modern day story collector, 'ready to record', wherever it stops. Collecting indispensable everyday stories from across the country and archive them for future generations, the MemoPod will be the embodiment of contemporary folktales. It will meander through our time visiting cities, festivals, gatherings and villages, looking for stories.

**메모리 포드** 상징적인 메모리 포드는 정착하는 어느 곳에서나, '기록하기 위해 준비된' 현대의 이야기 수집기이다. 메모포드는 전국으로부터 얻어진 필수적인 일상의 이야기들을 수집하면서, 미래의 세대를 위해 그것들을 보관하는 동시대 민간설화의 전령이 될 것이다. 이것은 도시와 축제, 모임 그리고 마을을 방문하고, 이야기를 찾기 위해 우리의 시간을 거닐 것이다.

In many metropolitan cities and particular Asian cities, parts of the old city are demolished to make way for new developments. Long term social structures are unraveled to form new alliances. Along with large scale city manifestations that come and go, people like to preserve some poignant memories to these passing moments. To counterweigh the abundance of digital ima-ges (from

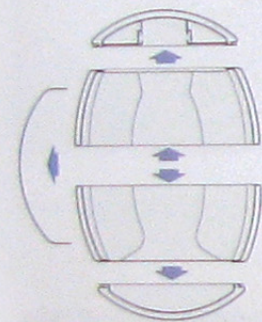
다수의 거대한 도시와 아시아의 특정 도시 내에서, 오래된 도시의 부분들은 새로운 발전을 위한 수단을 만들기 위해 철거된다. 장기적인 사회 구조들은 새로운 통합을 형성하기 위해 풀려진다. 들어오고 나가는 거대한 규모의 도시 현상들과 마찬가지로, 사람들은 이러한 일시적인 순간들의 어떠한 슬픈 기억들을 보존하는 것을 좋아한다. 카메라나 휴대폰으로부터

camera's and phones) the MemoPod collects highly personal audio stories from engaged people. Like the wandering storyteller in ancient times, but now to listen rather than to tell. *Written by TomDavid Architecten*

Use Cultural Design team Tom van Odijk, David Baars, Alexine Sammut

얻어지는 디지털 이미지의 풍부함 속의 균형을 맞추기 위해, 메모포드는 정해진 사람으로부터 지극히 개인적인 녹음된 이야기들을 수집한다. 이는 마치 고대의 방랑하는 이야기꾼과 같지만 말하기보다는 현재를 들어주는 것이다.

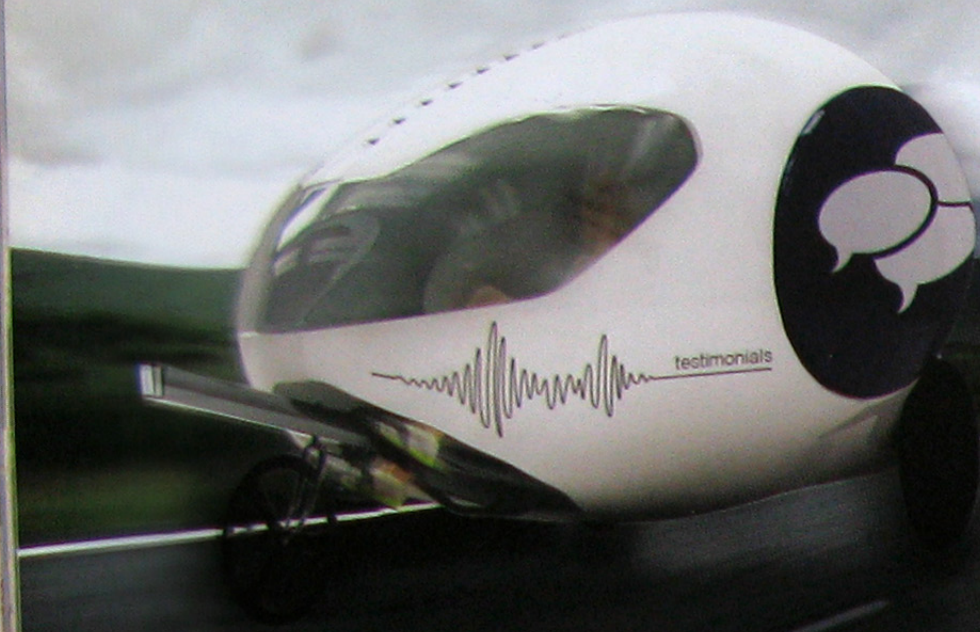
글: 톰데이비드 아키텍텐



**Disassembly**  
The pod consists of only 5 parts. The biggest parts are no larger than 1.8 x 0.8 meters and will fit through any door.







## >> DIAGRAM

### Exterior Shell

The outer shell is waterproof and robust (also suitable for the road).

The air inside the pod is ventilated. Warm air escapes from the top vents, fresh air comes in from vents at the bottom.

### Branding

The outer shell provides enough space for signs and logos (branding). Its unique appearance in itself is an iconic advertising feature.

### Power

The MemoPod is self-sufficient. Recording and lighting is powered by means of 'LiFePO4' batteries and alternators. (13 amp / 240 volt single phase supply)

### Acoustics

The outer shell, including the windscreen and the door are both thermally and acoustically insulated.

### Ready to Record

The MemoPod will have to be disassembled only in a few cases (e.g. to go on rooftops). In all other cases, the pod is instantly ready for use, just tilt to upright position. It is a balanced structure and can be done easily by 1 person in about 2 minutes.

### Upright

The upright position generates a great amount of attention, for example in crowded areas (festivals or shopping street). The pedal-boom doubles up as a ladder to access the producer seat.

### Studio

The recording space in the MemoPod can accommodate 3 people and a folding table, coats etc... In addition, there's sufficient storage space for recording equipment.

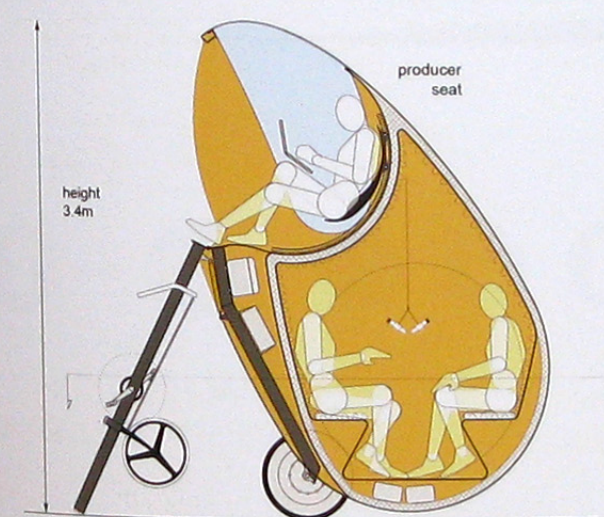
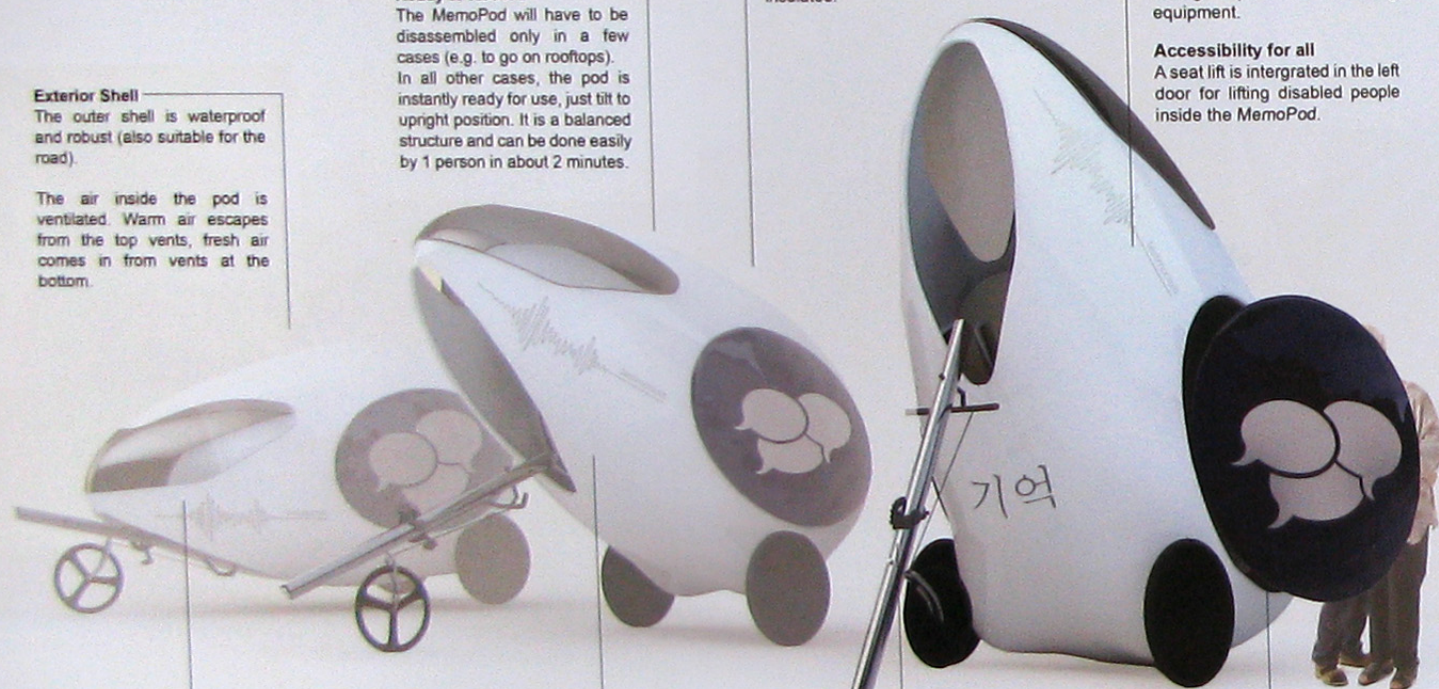
### Accessibility for all

A seat lift is integrated in the left door for lifting disabled people inside the MemoPod.

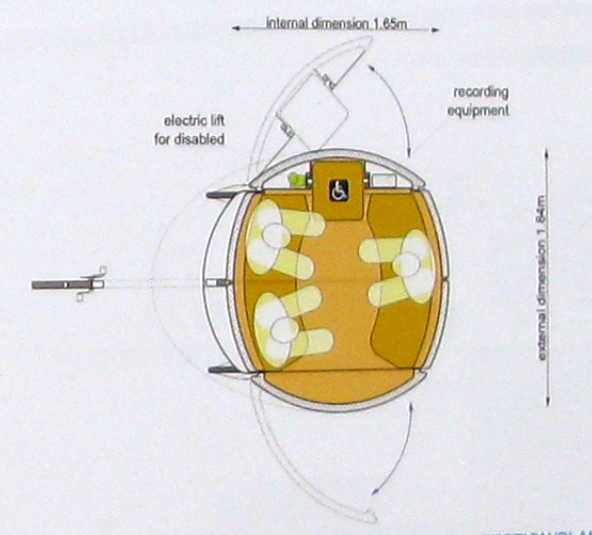
### Interior

The inner shell is finished with acoustic foam for dry sound and short reverberation.

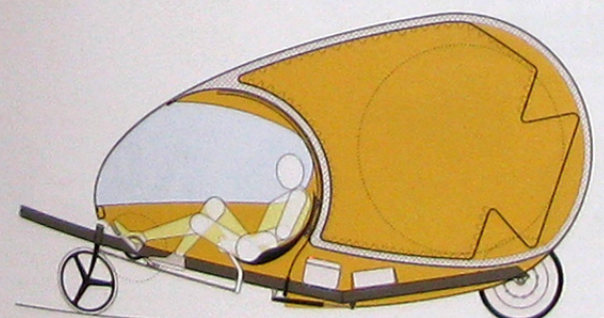
The recording space in the MemoPod has a professional studio look. The interior is intimate and comfortable and has a luxurious finish with soft and smooth seats (easy to clean).



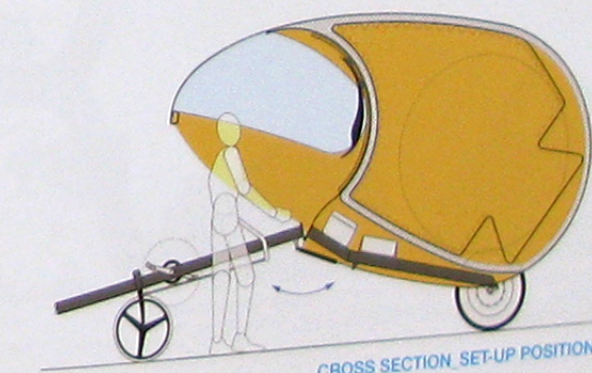
CROSS SECTION UPRIGHT POSITION



SECTION/PLAN



CROSS SECTION DRIVING POSITION



CROSS SECTION SET-UP POSITION



Organic form

# SUSTAINABLE MARKET SQUARE

Architect\_TomDavid Architecten Location\_Casablanca, Morocco

The site is situated right next to the Medina and in consequence interwoven with the indispensable social and economic structures of the Old City. Both legal and illegal markets dominate the streetscape and are vital to the local economy. The design will have to serve as an example on how to improve the practical aspects of the market but leaving the existing social economic structures intact.

**Concept** The architects combine indigenous techniques for shelter and heat control, the accountability of its residence and innovative low-maintenance materials. In this way, we create an efficient and pragmatic icon for the next generation market which serves as a catalyst for improvement.

**지속 가능한 시장 공간** 대지는 메디나의 바로 옆에 위치하기 때문에 구 도시의 사회경제적 구조들과 필수 불가결하게 맞물리게 된다. 합법적인 시장과 불법적인 시장이 모두 이곳의 풍경을 지배하며 지역 경제의 핵심을 이룬다. 디자인은 시장의 실용적인 측면들을 향상시키면서도, 기존의 사회경제적 구조들을 건드리지 않고 남겨두는 방법의 한 본보기로 적용해야 할 것이다.

**개념** 건축가는 쉼터의 기능과 그 주거가 책임져야 할 열 조절의 토착적 기법들 및 유지관리가 덜 필요한 혁신적인 소재들을 결합한다. 이러한 방법으로 우리는 향상을 위한 촉매 역할을 할 차세대 시장의 효율적이고 실용적인 아이콘을 만들어낸다.

**Design** The shape of the canopy refers to nature, providing shade and shelter like a tree. The overlapping of the canopy-leaves ensures the cascading drain of the rainwater and allows air circulation. The curved concrete forms of the design are both a tribute to modern Casablanca architecture from the 50s as an endorsement of the beauty of the female form, as a nod to the dominant male culture on the street.

**Sustainability / Positive development** Besides solely as a design-tool, in this case sustainability should be a societal journey. This journey brought about by acquiring new awareness and perceptions, by generating new solutions, activating new behavioural patterns and, hence, cultural change. This process must be seen as a

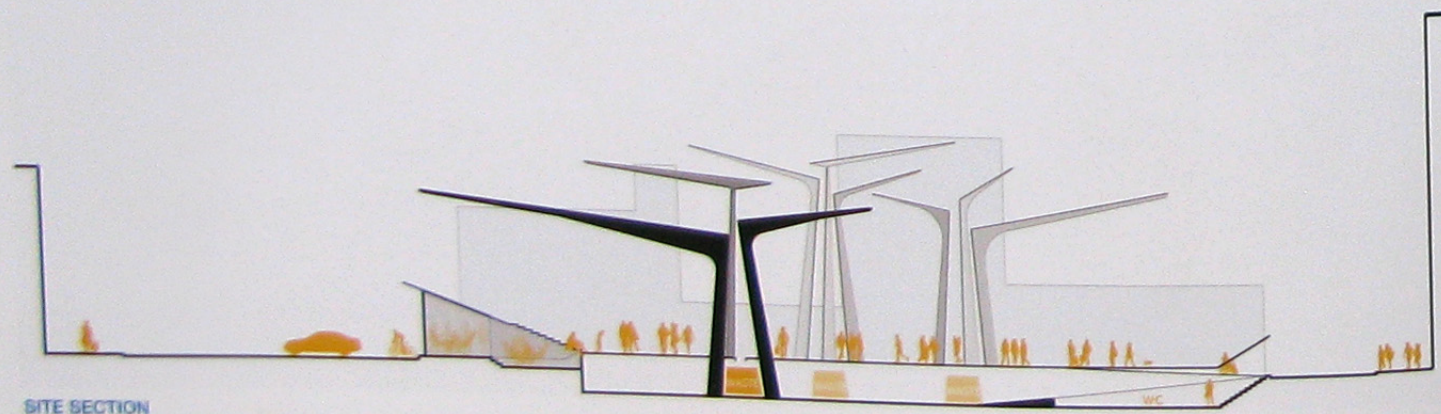
**디자인** 캐노피의 모양은 한 그루의 나무처럼 그늘과 쉼터를 제공하는 자연을 암시한다. 캐노피의 날개들은 잎사귀처럼 서로 중첩되어 있어서 빗물의 계단식 배수가 일어나고 공기의 순환이 이루어진다. 이 디자인의 곡선적인 콘크리트 형태들은 여성적 형태미에 대한 지지인 동시에 거리를 지배하는 남성 문화 또한 인정하는 표시로서, 50년대부터의 현대 카사블랑카 건축에 대한 찬사이다.

**지속 가능성 / 적극적 개발** 프로젝트의 지속 가능성은 설계 도구일 뿐만 아니라 사회적인 과정이어야 한다. 이는 새로운 자각과 인식을 얻고, 새로운 해결책들을 만들어내며, 새로운 행동 패턴 및 그에 따른 문화적 변화를 활성화함으로써 일어

positive development under the responsibility of the local residents to increase economic, social and ecological capital. In our design proposal therefore, our sustainable contribution is twofold. First by using low-tech techniques to collect and reuse rainwater, clean the market-floor and applying evaporate cooling by using the heat of the sun and the wind to freshen the air under the roof. Second, by implementing a refuse and waste handling system for the market and using low-maintenance materials, liveability and durability will be improved. Written by TomDavid Architecten

**Use Public** **Site area** 790m<sup>2</sup> **Building area** 48m<sup>2</sup> **Gross floor area** 458m<sup>2</sup> **Height** 12.8m **Design team** Tom van Odijk, David Baars, Alexine Sammut **Client** [AC-CA] International Ideas competition

난다. 이 과정은 경제적·사회적·생태적 자본을 늘리는 목적으로, 지역 주민들의 책임 하에 행해지는 적극적인 개발로 보아야 한다. 따라서 우리의 설계 제안에서의 지속 가능한 방법에는 두 가지 측면이 있다. 첫째, 로우테크(low-tech) 기법들을 활용하여 빗물을 수집한 뒤 재사용하고, 증기 냉방을 적용하여 태양열과 바람으로 지붕 밑 공기를 환기시키는 방식이다. 둘째, 시장을 위한 쓰레기 및 폐수 처리시스템을 실행하고 유지관리 소요가 적은 재료들을 사용함으로써 거주 적합성과 내구성을 증대시킨다. 글: 톰데이비드 아키텍트



SITE SECTION







## >> CONCEPT SECTIONS

### CLIMATE MANAGEMENT

The canopy not only provides shade. By using the heat of the sun, the water which will be held on top of the canopy will vaporize during the day, evaporative cooling. A low cost and low-technology alternative to refrigerated air conditioning.

### WATER MANAGEMENT

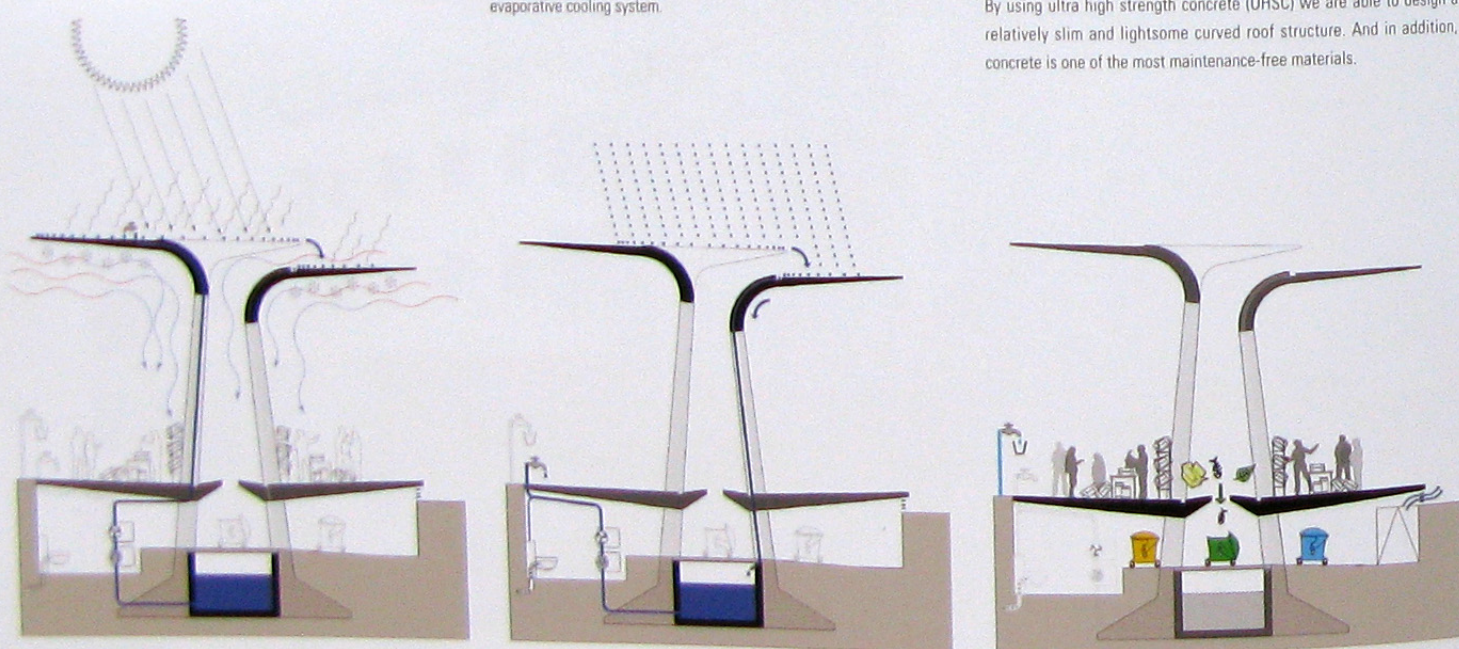
The average quantum of rain annually in Casablanca is 425mm. Which, in our situation equals about 300,000 liters per year. The amount of stored and reusable rainwater therefore will be about 800 liters a day, sufficient to flush approximately 150 toilets and to clean the market square every day. During extreme heat the greywater can be used to provide the roof shells with water that is then needed for the evaporative cooling system.

### WASTE MANAGEMENT

A disposal system is introduced as a service level under the market square. Three holes in the floor, each in the middle of a set of three columns, ensures that all market waste can be collected and separated below surface.

### INNOVATIVE AND LOW MAINTENANCE MATERIAL

By using ultra high strength concrete (UHSC) we are able to design a relatively slim and lightsome curved roof structure. And in addition, concrete is one of the most maintenance-free materials.



## >> EXPLODED AXONOMETRIC

