6 roup POLITECNICO DI MILANO

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Show the backstage Macba Study Center

Analysis

1.0

Analysis of the Macba Study Center area – position, circulation, accessibility, population, request of the call and conversation with center's staff about the issue of this center led us, through the long case study, to the final slogan "Show the Backstage".

This mostly represents the concept of our project, its main ideas and goals. Macba Study Center right now is a left behind, not much visited place, which stands in the shadow of its "superior" Macba Museum. Its unattractive façade stops it to show its rich collections and make people see what this center really has behind its walls. Firstly, the proposal deals with its lobby to become a **more flexible space**, which can offer something for everyone and **respond to different events taking place in the same lobby** by its different configurations of the space. Secondly, it deals with organization that can follow this flexibility. **Cardboard** comes up as universal solution. This **cheap**, **sustainable and easy-changeable**

material offers a number of shapes, forms and sizes to be applied as needed. Its **two different textures** give also a choice of appearance which can make an interesting configuration. As you can play with lego, you can play with simple form of cube, which can be sofa, bookshelf, table, or a whole wall if you need it to be.

2.0

Finally, the proposal deals with the connection of this material with three areas: walls, floor and ceiling. Walls are arranged as a net of the same cubes which act as "windows"- if you need a table for your computer, you pull down the lower one from the wall. If, otherwise, you need a bookshelf, you can choose the upper one. If you need a plane wall for projections, you can take them all back. The **floor** acts in the same way of flexibility, by changing the position of the cubes. The **ceiling** gives the best flexibility, by giving you a chance to rotate and move in all directions. Furthermore, on the main facade of the Study Center can be **projected** everything that center offers and what happens inside which is the main idea of our concept. This way, it could be possible to see what you can find inside and it will not be seen as another building to be passed by. The **square** can be transformed into the open air theatre or cinema, again with different cardboard configuration where people

can stay, sit, read, rest, etc. In this way, both Center and Square will become a live space, visited during the day and night, by people of different ages, nationalities and interests to share their ideas and knowledge.

CONCEPT DEVELOPMENT

3.0

-Show the backstage-

The slogan used for the concept, 'Show the backstage', means to project and show on the facade everything that is happening on the inside. All the art that is produced in the lobby, all the workshops introduced, will be made public by presenting it to the others who are outside Macba. This way people will stop and take a look and wonder what is going on 'behind the scenes'. Make an example of a workshop all day to develop with the community, some development kit to display and interact with art... This should be the main example, but then the architect suggests to the curator new ways to use the space.

The architectural project is done to be flexible and practical, and open to the community to many different uses. Think about an iphone, it is a platform where you can add a lot of apps personalizing tremendously the way you use it.

The Macba lobby could be a platform/hub eager to be used, a system that shows openness, self-organization, inclusiveness, social and didactical aims.

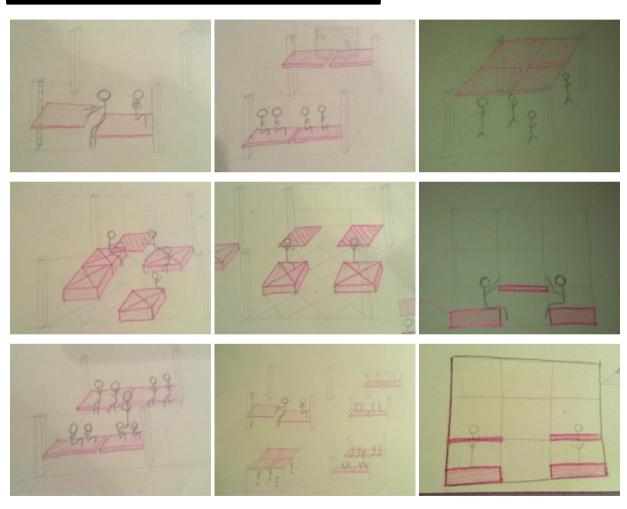
We think of a place where **art is not only shown but** it's actually produced in front of you....

Energy is the coin to use in Macba lobby, you use the energy you produce during the day, is it both electrical, mechanical and creative energy.

With this concept, we turn the lobby and the Plaça dels Àngels into an area which is occupied by people at all times.

The lobby, being a flexible space, can be used for many different activities. It can be used as a **working space**, an **exhibition space**, a place where different **workshops** are organised, a cafè/restaurant as a social space, maybe even a space for **relaxation with activities such as yoga and meditation**.

4.0

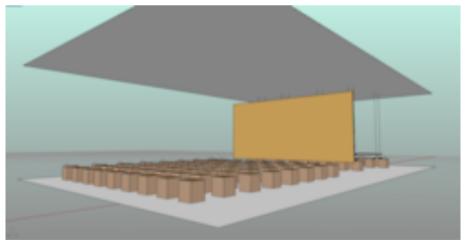


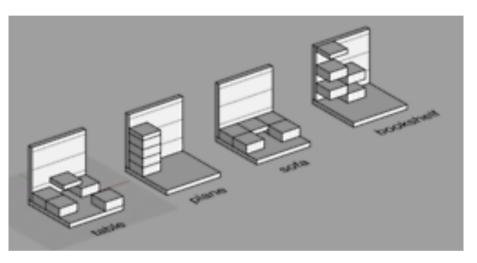
Sketches of the first ideas of different configurations for the lobby

The idea is to compose a complex space, with simple elements that are easy to stock.

5.0





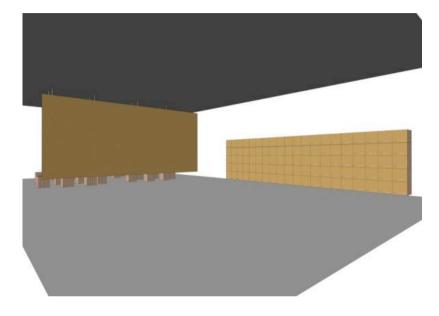


Conference hall/meeting place/presentation space/cinema/reading place

Different uses of the cardboard box

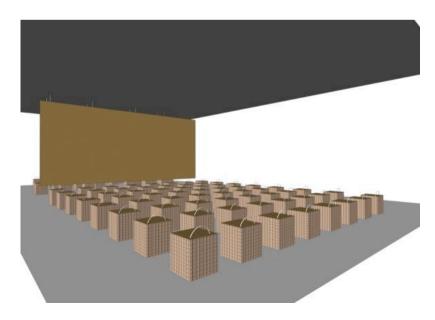
16.00

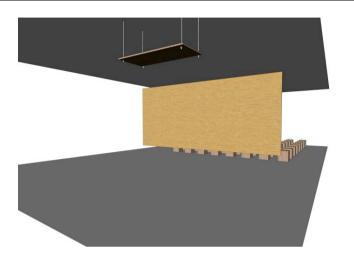
Free spaceSeats are storerd on the wall



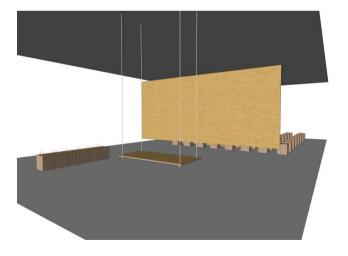
21.00

Cinema

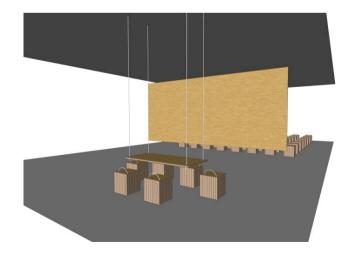




Cardoboard planes as roofing system



Cardoboard planes to dispose materials



Possible configuration **debate**

Farshid Moussavi on the need for parametric thinking:

6.0

There is nothing new about parametric thinking in architecture. **Great architecture has always been aware of its societal role, and has consequently been informed by multivalent parameters.** Parametricism with a capital 'P', on the other hand, dispenses with the hindrances of external parameters and promotes the autonomy of architectural forms. It promises to be a style that invents novel ways of shaping matter to produce unexpected spaces – more than often with dazzling results. Something is wrong, however, as every form emerging out of Parametricism is inexplicably (yet predictably) smooth and undulating, made up of small, gradually changing units. How is Parametricism going to keep its promise?

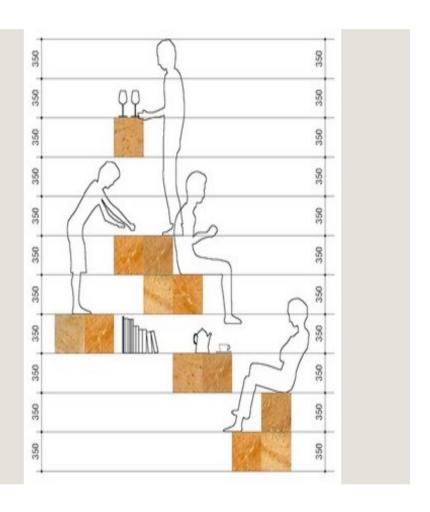
When I joined the Architectural Association in the early 1990s, John and Julia Frazer's unit was the only one focusing on the processes of formgeneration (most others were investigating semiotic functions). Prefiguring Parametricism, their best students pursued a detached process of form-finding by writing new algorithms. Conversely Diploma 5, which I co-tutored, approached parametric thinking as a way to integrate formal experimentation with performative concerns – form derived from cultural, social and economic contexts. Students gathered information surrounding their project through fieldwork, before proposing a 'program' for generating form. The intention was to incorporate a discipline of analysis, avoiding form

for its own sake. This necessitated establishing a correlation between a complex array of relevant external parameters through the architectural techniques of geometry and organisation. As young tutors, we were accused of being interested in pseudoscientific data, produced without any ideological stance. I remember inviting Peter Cook to one of our reviews – he was sufficiently offended by our lack of playfulness that minutes into the review he stormed out. Admittedly, Diploma 5 had its shortcomings - it was limited by Autocad and Microstation. The students spent so long gathering data that little time was left to run 'programs' again, in order to change how parameters were drawn together. The method was bottom-up, so students could only control the process and not the form resulting from it. The world has moved on since our initial experiments with parametric design. It is faced with great problems defined by complex causes, all of which are linked. It is imperative that we cease perceiving architecture as only matter – a plastic art - and revisit parametric thinking after our distraction with Parametricism and its segue into formal extravagance. Architecture is a material practice, not a matter-practice. Once architecture is removed from the complexity of its surroundings, it freezes in time, while its environment continues to change. Architects must engage with the physical attributes that define these social and environmental parameters: climate and economics, wood and steel.

7.0

These 'potencies' must be considered as architectural material. Parametric software collates this material as parameters so that we can make formal decisions that are sustainable. With it we can design not only novel forms, but ones that, for instance, use less material in structural spans, render envelopes more energy-efficient, optimise seating alignments, fine-tune interior acoustics and make buildings responsive to their urban surroundings. Forms will be not be uniform (following Modernist ideals of efficiency) but optimised, differentiated, anisotropic.

Let 'sustainability' not be a safety-check on the architectural process, but a way to design. Today's software empowers us to think transversally across design information and to make decisions based on the feedback loops between formal and functional relationships. Parametric software must be rescued from the enclosure of Parametricism - however spectacular its effects - and put to work producing intelligent designs that embrace the full complexity of our environment. It is too easy to use our frustration with Parametricism, or even the shock of the economic recession, to hark back to nostalgic and provincial Modernism. The world is too complex, its problems too pressing. The built environment and the cultures it embraces require parametric thinking that places material over matter.



http://www.archdaily.com/7638/final-wooden-house-sou-fujimoto/

Show the backstage



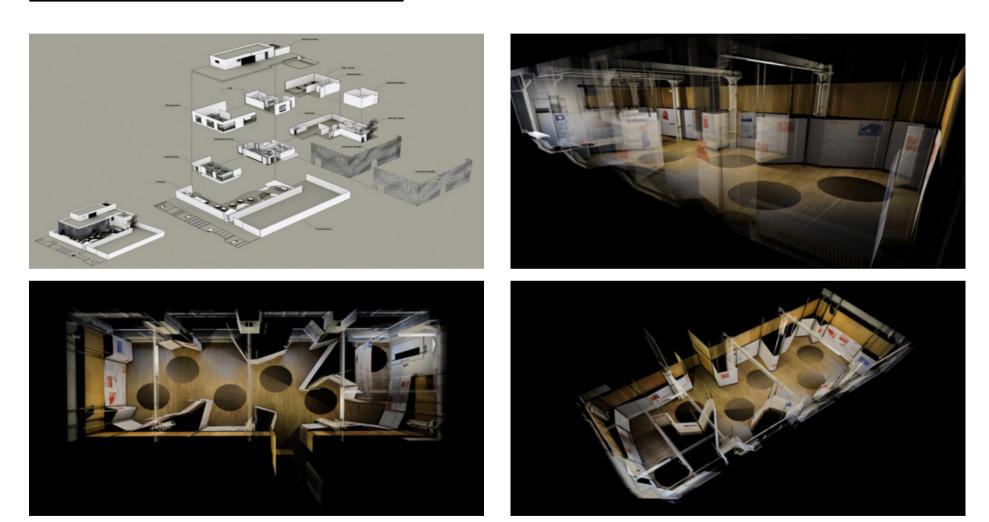
LOBBY

8.0

Case studies

REPRESENTATION

9.0

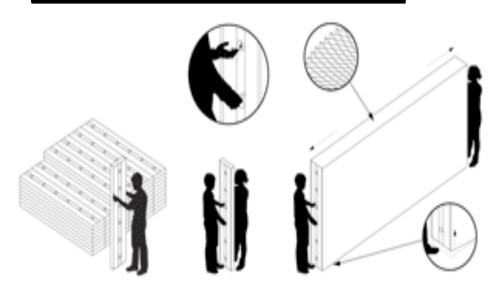


Young Architect of the Year Award 2011 Exhibition - Projects - ScanLAB Projects

The Young Architect of the Year Award 2011 exhibition at the Architectural Foundation designed by Moxon Architects.

LOBBY

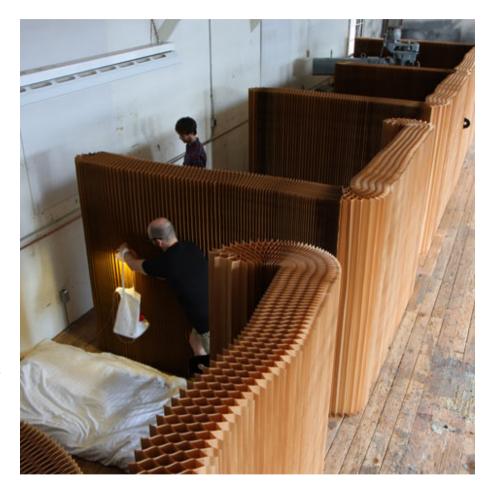
10.0



Canadian studio Molo has designed a system of paper partitions called Softshelter that provide privacy at shelters in the wake of a disaster

 $\underline{molo \cdot paper\ softwall}$

Dezeen » Blog Archive » Softshelter by Molo



! soft packable diviosions!

LOBBY

11.0





Sou Fujimoto architects, Final wooden house, Japan

! a simple element to design a complex space!

LOBBY

12.0



Cherry Tree by British designer Tom Price

http://www.dezeen.com/2011/11/22/cherry-tree-by-tom-price/

LOBBY

13.0

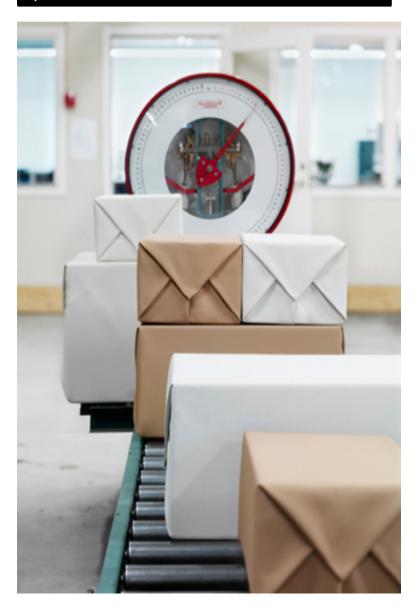


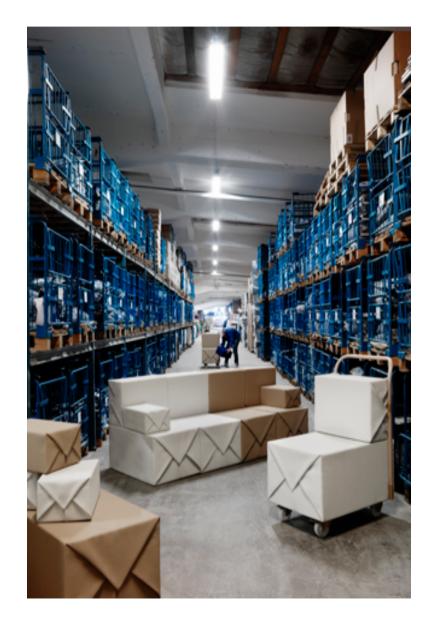
TAF Arkitektkontor, Sweeden

http://www.tafarkitektkontor.se/projects.asp? id=132

Flexible cardboard furniture Some references for the lobby

LOBBY



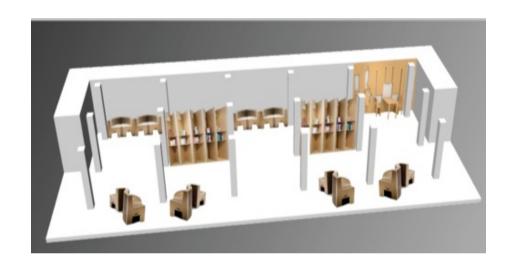


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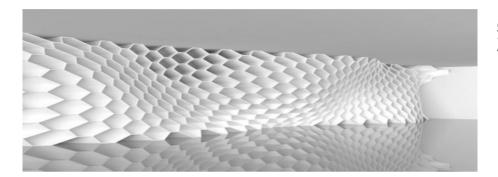




First ideas about interior space

LOBBY

17.0



<u>designplaygrounds.com » Archive » Honeycomb</u> <u>Morphologies [Rhino Grasshopper</u>



designplaygrounds.com » Archive » Boxel Pavilion



LOBBY

18.0



Retractable Public Spaces Furniture 'Pop Up' developed by Dutch designers Carmela Bogman and Rogier Martens.

http://vimeo.com/channels/openaircinema#5595869

http://we-make-money-not-art.com/archives/2005/10/the-project-cam.php

http://www.woohome.com/furniture/retractable-public-spaces-furniture-pop-up

! disappearing furniture concept!

LOBBY+SQUARE

19.0



Installation 1:2001, Casagrande & Rintala, Firenze Biennale of Contemporary Art 2001

http://vimeo.com/channels/openaircinema#5595869

! a book or a brick!

LOBBY

20.0



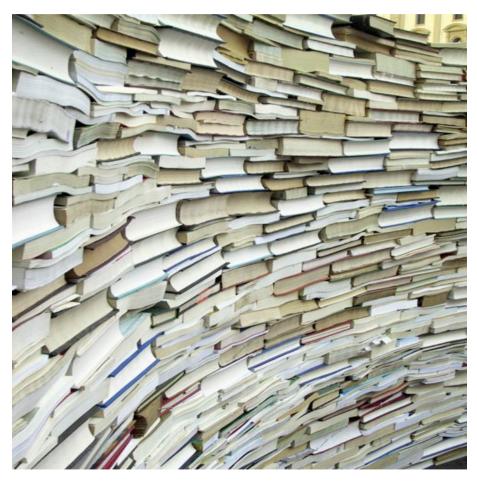


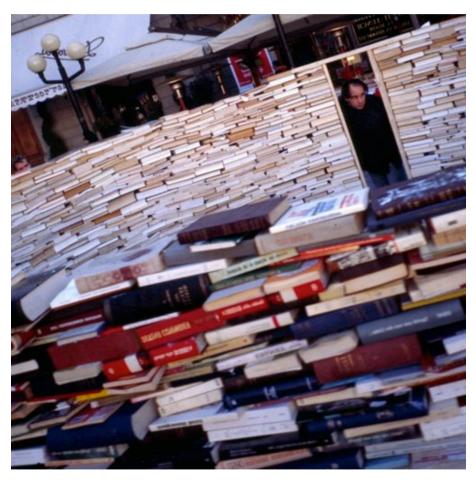
! a book or a brick!

LOBBY+ SQUARE

21.0

Installation 1:2001, Casagrande & Rintala, Firenze Biennale of Contemporary Art 2001





<u>Project - Installation 1:2001 - Architizer - Empowering Architecture: architects, buildings, interior design, materials, jobs, competitions, design schools</u>

Show the backstage

6roup

LOBBY

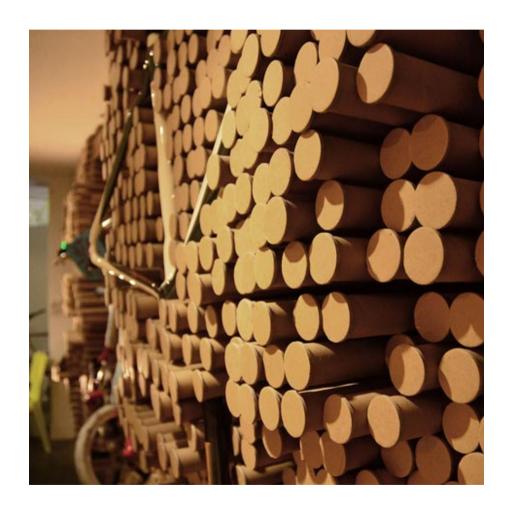
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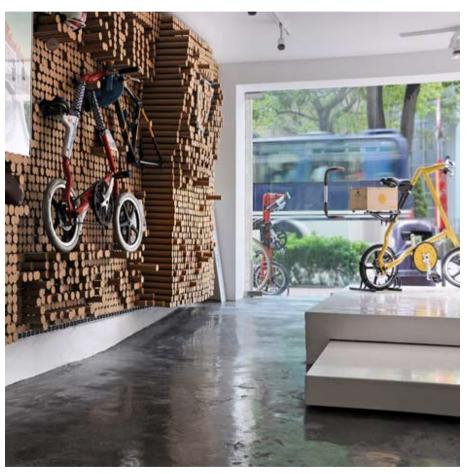


! Not only cardboard cubes!

LOBBY

23.0





! Not only cardboard cubes!

Show the backstage

6roup

LOBBY

24.0



<u>Dezeen » Blog Archive » Karis by Suppose Design Office</u>

! Recycled tubes space characterization!

LOBBY

25.0







! Recycled tubes space characterization!

Show the backstage

6roup

LOBBY

26.0



Molo design

http://molodesign.com/

! Recycled tubes space modulation!

Show the backstage

6roup

LOBBY

27.0



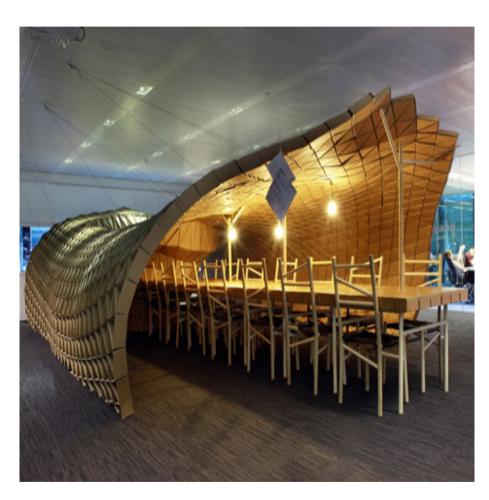
london design festival o8: b3 designers cardboard cafe

! Our cardboard "bricks"!

LOBBY

28.0





Pupa by Liam Hopkins of Lazerian, London

! Parametric cheap elements!

LOBBY

29.0



drew seskunas: folded pyramidal light installation

Politecnico di Milano





! Parametric cheap elements!

LOBBY

30.0



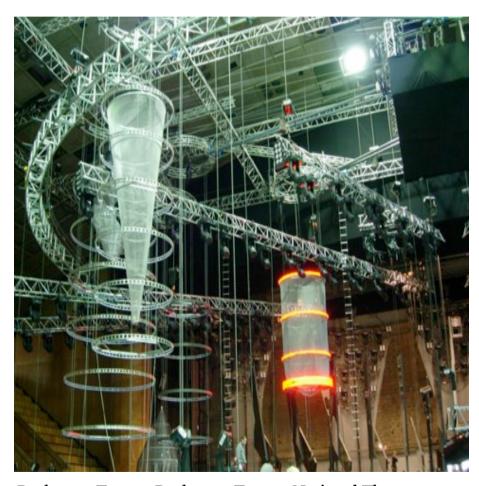


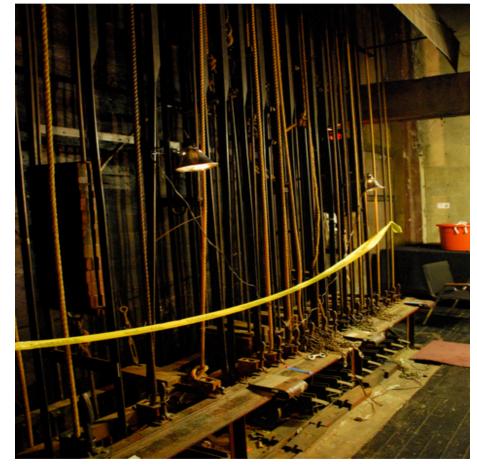
Max Lamb

- "The first rule of sustainability is to align with natural forces, or at least not try to defy them." - <u>Paul Hawken</u>

LOBBY

31.0





<u>Backstage Tours - Backstage Tours - National Theatre</u>

! How fascinating is the backstage!

FACADE





Klein Dytham, Uniqlo, Tokyo

FACADE

33.0

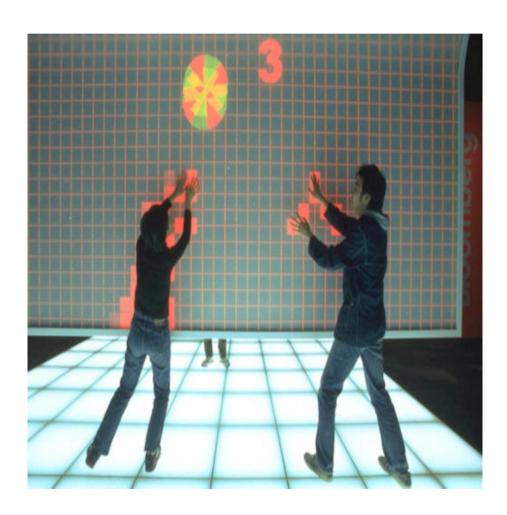




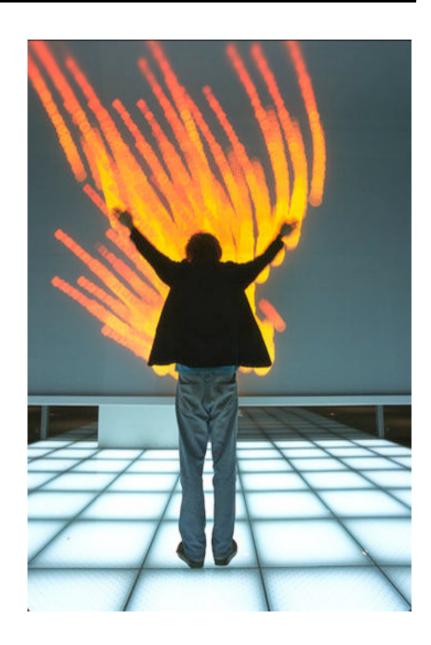
 $\underline{led\ action\ facade: langarita-navarro}$

<u>DevLab</u>

FACADE



Klein Dytham, Bloomberg ICE, Tokyo



SQUARE

35.0





Temporary Pavilion at the Aarhus School of Architecture, by student Thibault Marcilly, Denmark

<u>Temporary Pavilion at the Aarhus School of Architecture |</u>
<u>ArchDaily</u>

<u>Instant Untitled / MOS Architects | ArchDaily</u>

SQUARE

36.0



Carton 5000 by Laurent Boijeot, Sébastien Renauld and Nicolas Turon, Tours (France)

Fantastic reference for temporary square space configuration

CARDBOARD!!!

37.0 producers of the cardboard situated in

The producers of the cardboard situated in Barcelona:

- -MIQUEL Y COSTAS & MIQUEL S.A. (GRUPO), Tuset 10 08006 Barcelona
- -TORRASPAPEL S.A., Gran Vía Corts Catalanes 678 08010 Barcelona
- -CARTONAJES RAKOSNIK, S.A., Cuzco 30 08030 Barcelona
- -HALLMARK CARDS IBERICA SA, Gran Via Les Corts Catalanes, 680 PLT 4 08010 Barcelona
- -LITOFAN, S.A., Paseo De La Verneda, 78 08020 Barcelona
- -MB PAPELES ESPECIALES SA, Tuset, 8 10 08006 Barcelona
- -MEADWESTVACO EMBALAJE, S.L. Mallorca, 272 08037 Barcelona
- -SERONDA SA, Calabria, 267 4 1 08029 Barcelona
- -TECNO, S.A., TERCIO NTRA. SRA. MONTSERRAT, 80 08020 Barcelona

http://www.es.all.biz/en/buy/goods/?rubric=1183

http://directorios.netfirms.com/eng/papel/



Here we present the list of the Spanish cardboard manufacturers who could provide the needed material for the realization of our proposal. What we suggest is an cooperation agreement with one of them so that they would provide Macba the cardboard and at the same time Macba would promote them as the official sponsors. We marked Cartonajes Rakosnik S.A. as the best choice for this from our point of view.

find more information on

6roup.tumblr.com