



# **OPEN BUILDING**

**an old reality**

**with new dimensions**



**The built field is never finished  
A reality too often overlooked  
But there is also stability**



**Ise Shrine, Japan**

**... we know of  
rituals of  
renewal**

**(in Japan we see a movement  
to activate the building stock ...  
and enabling legislation for  
200 year housing...)**

**the inevitability of change is a venerable contemporary tradition, dealt with both formally and informally...**





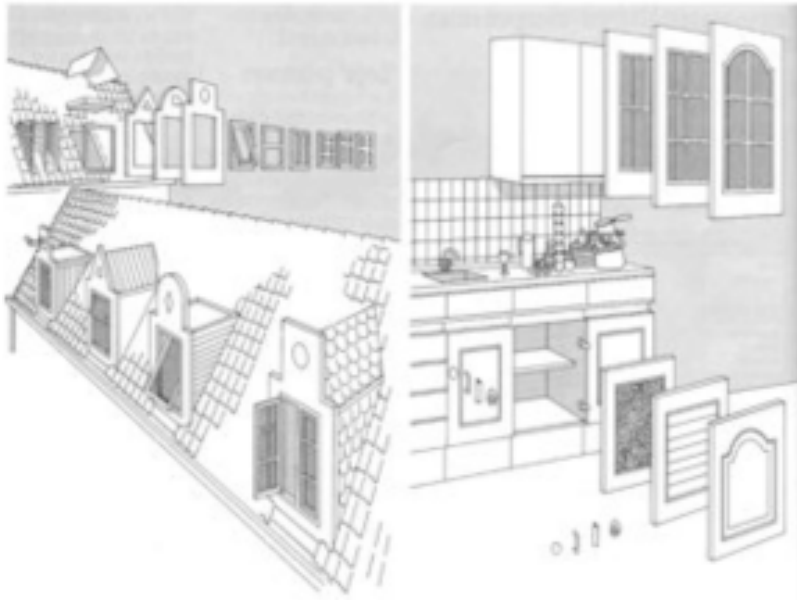
**the build field is  
not a solo act**

**we make form, hand  
it off to the future,  
expect it will  
experience change  
undertaken by  
others.....**



**and...technical issues abound...**

**Because of the inevitability of change, entanglement is to be avoided...while interface conditions should enable substitutes... (also involving many parties...)**





100 years



25 years



5 years

Courtesy Canton Bern OPB

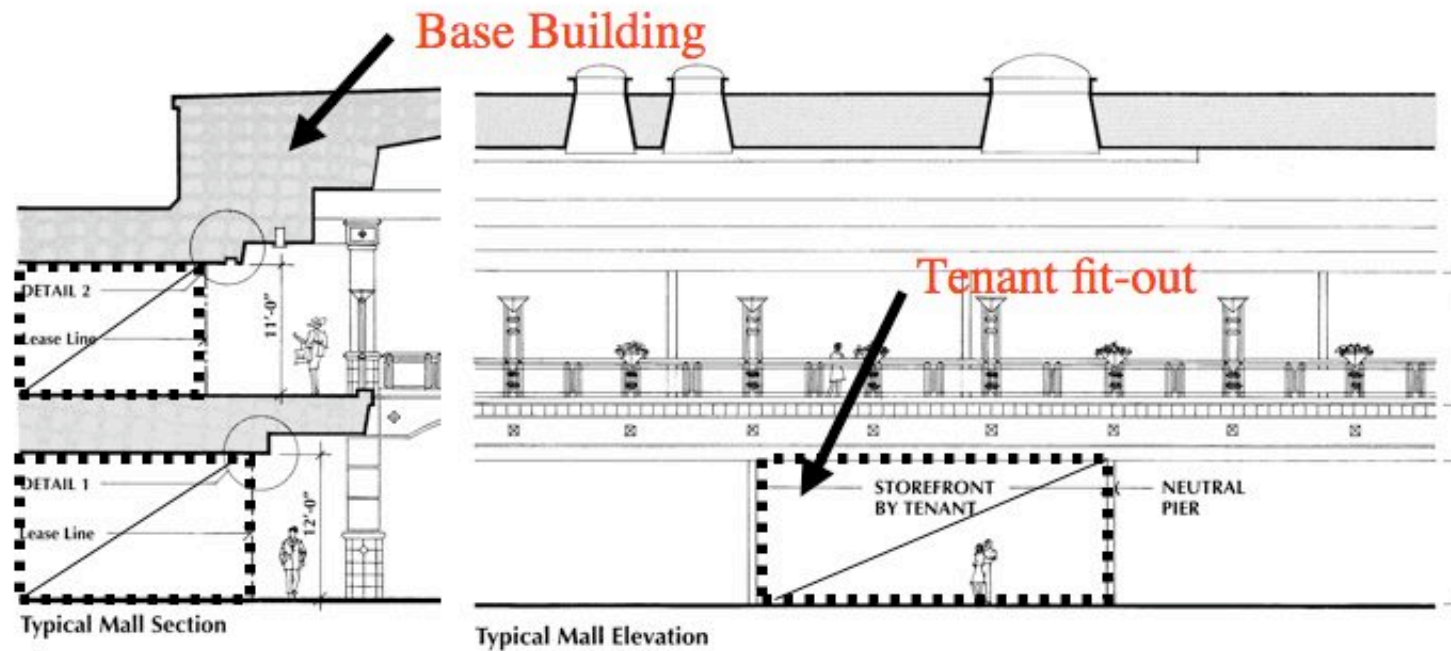
**...then, a  
business or life-time  
asset value view  
of how the  
built field  
behaves**



**Open building is alive and well in the non-residential building stock ...which renews itself all the time...**



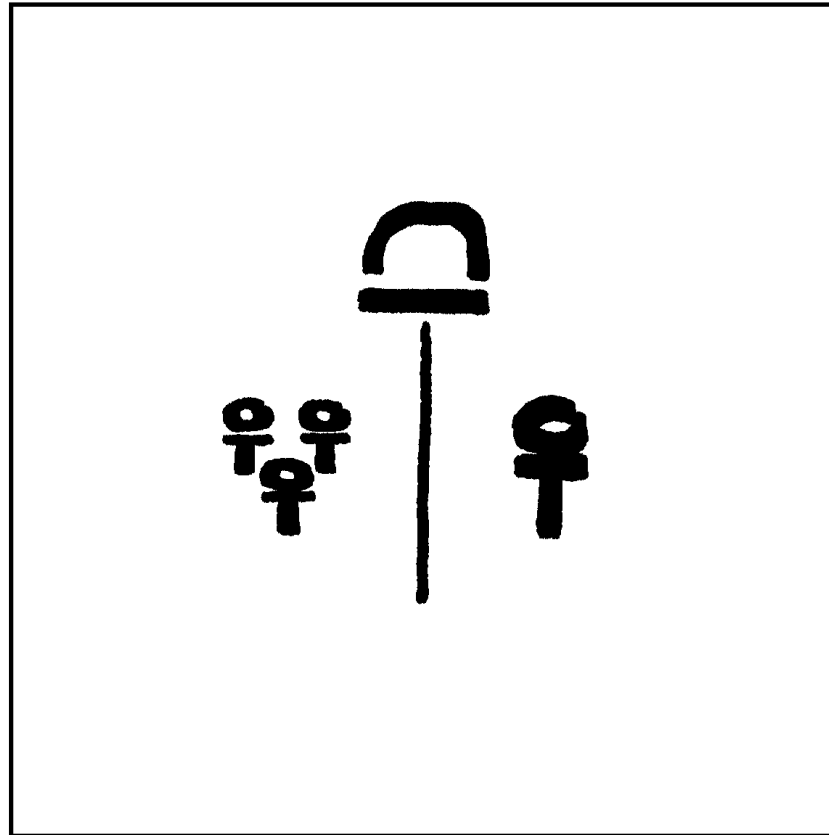
Shopping centers are handled in very conventional ways...



**...a species of infrastructure...**

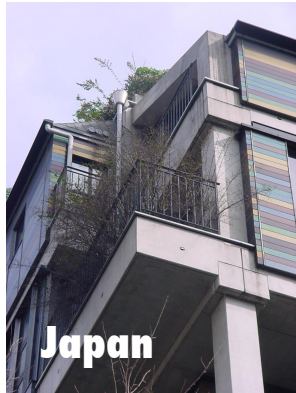
**distributed design / distinct territories / change over time within agreements**

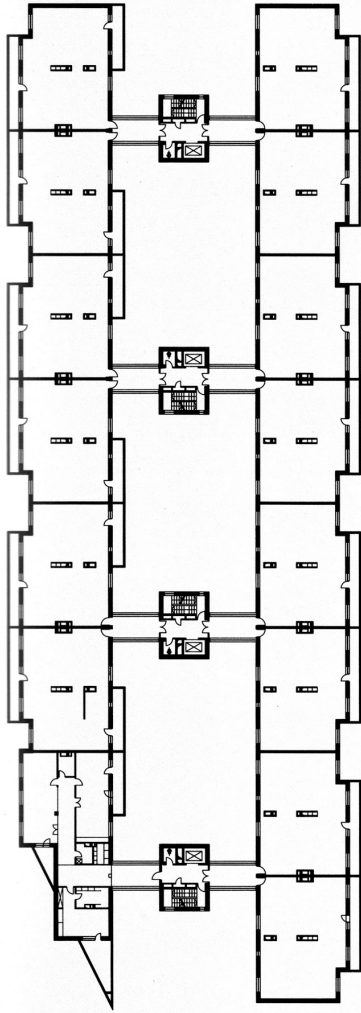
# Residential Open Building



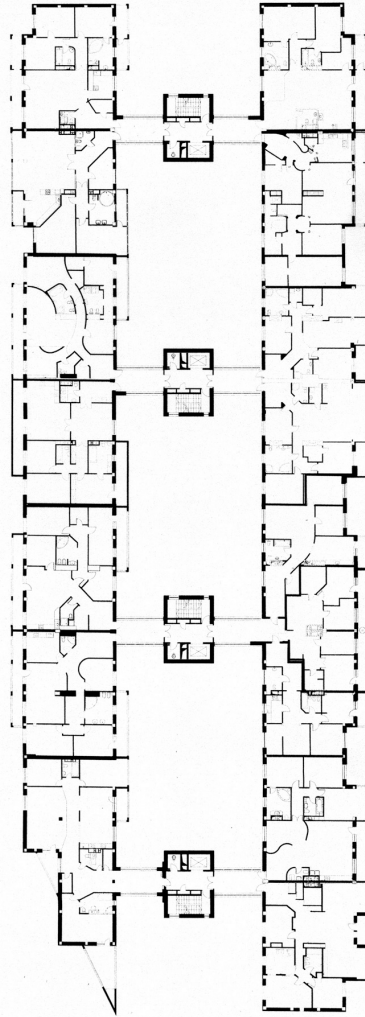
From **THE ABC's of HOUSING** by John Habraken

# SOME OF MANY HUNDREDS OF OPEN BUILDING PROJECTS





ТПО «Резерв»  
Жилый дом в Москве. 2000  
план дома  
планы квартир

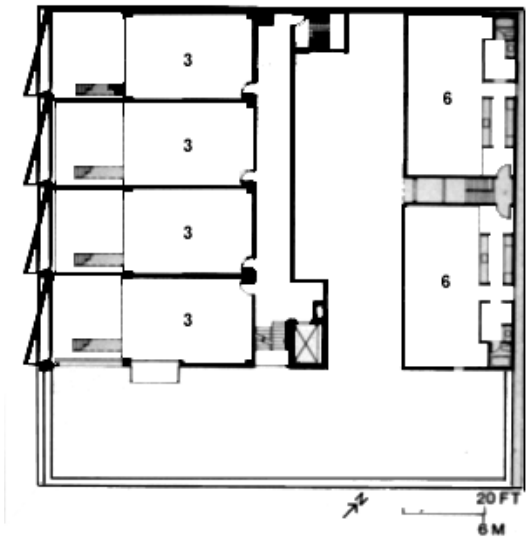


ТПО Резерв  
Apartment block in Moscow, 2000  
plan of the building  
plans of the apartments

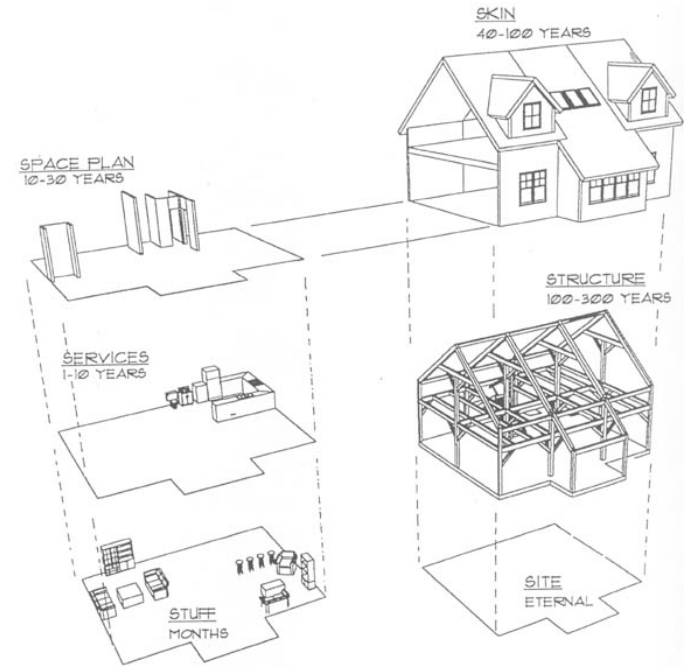


**Catamaran House in Moscow**  
Reserve Architects / 2004





**Banner Building, Seattle / 1994**  
**Architect: Weinstein Assoc.**  
**Developer: Koryn Rolstad**



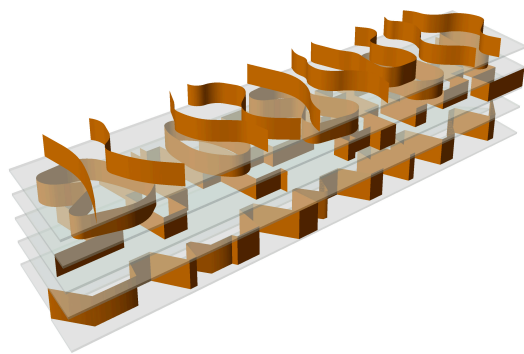
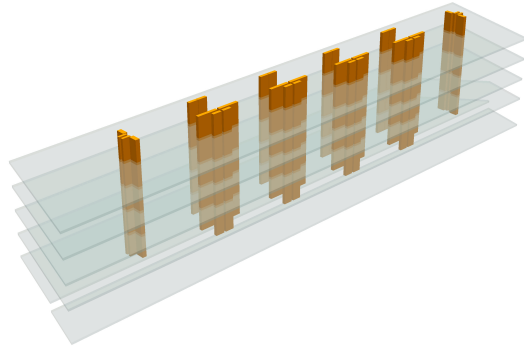
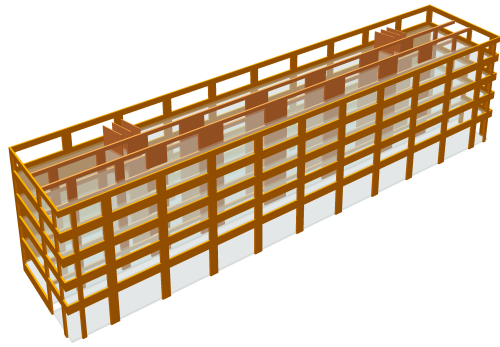
## Bensonwood Homes "Open-Built" Timber frame houses





**Split Hendrick North / Amsterdam  
1998 / Architect: Joanna de Jager**



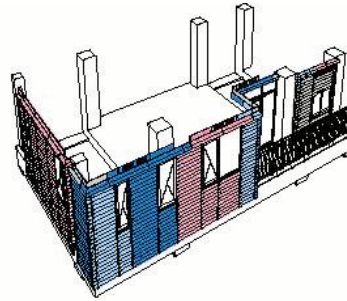
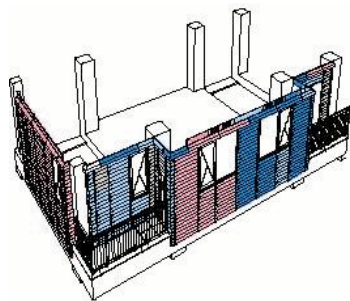


**Multifunk / Amsterdam / 2007**  
**Developer: Lingotto BV**  
**Architect: ANA Architcts**





4 楼平面图 S=1/250



Fixed



Moved



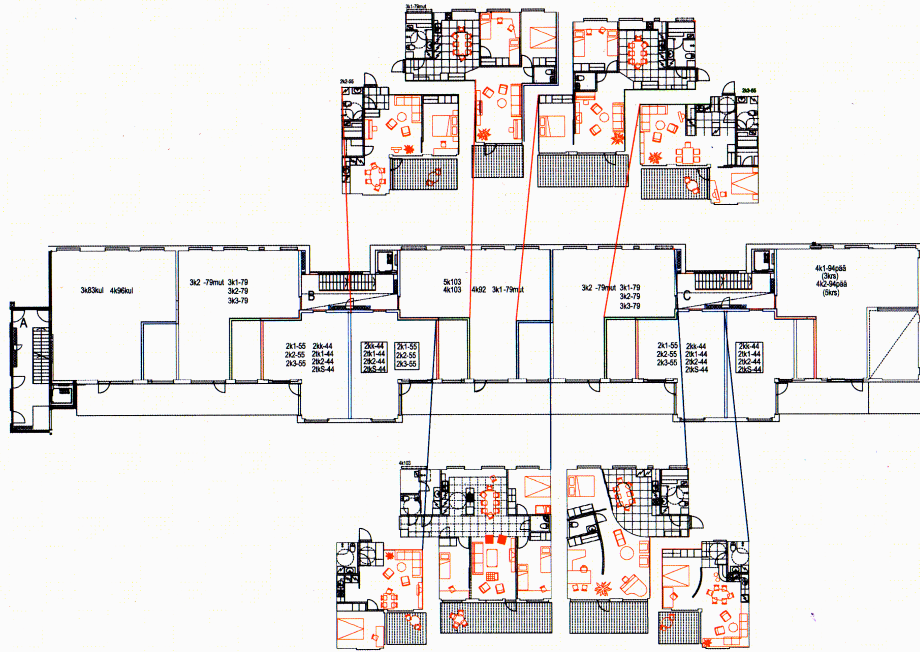
Moved  
(modified)



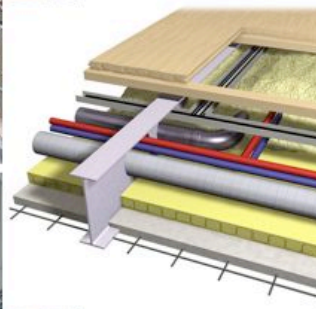
Newly installed/  
not used



**NEXT 21/Osaka / 1995 -  
NEXT 21 Design Team  
Professor Yositika Utida, Team leader**

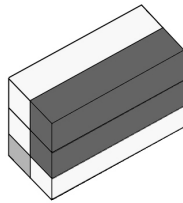
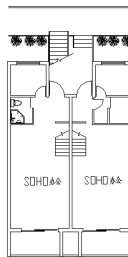
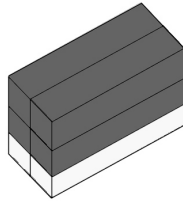
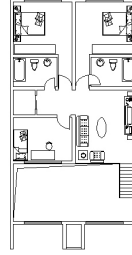
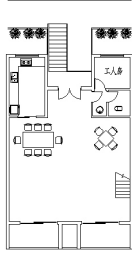
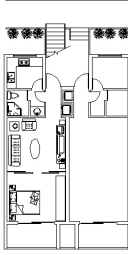
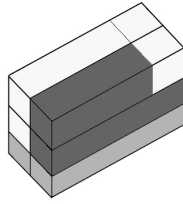
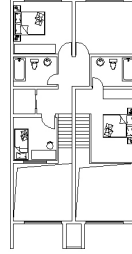
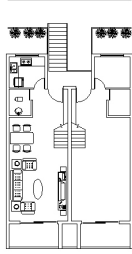
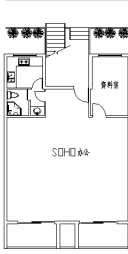
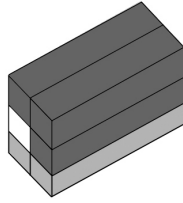
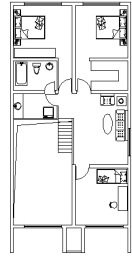
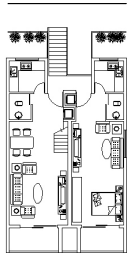
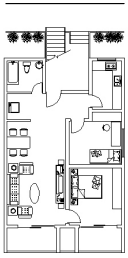
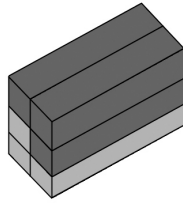
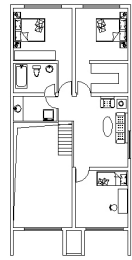
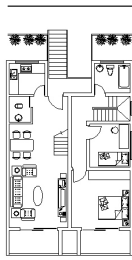
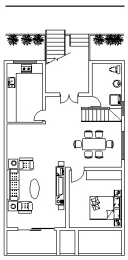


**Arabianranta / Helsinki / 2001**  
**Developer: Sato Development Company**  
**Architect: Esko Kahri**



**The floors are constructed to provide a large “wet zone”....**





**House-Golden Age**  
**Chongqing, China, 2006**  
**Architects: Li Haile, Tang Ning**



# Wenswonen

van den Brink, Architects  
Zaltbommel, NL / 2002



# What's next?

- **New ways to teach architecture**
- **New ways of seeing architecture**
- **New kinds of businesses**

# **HOMeworks**

**A new kind of service company  
for customized residential fit-out**

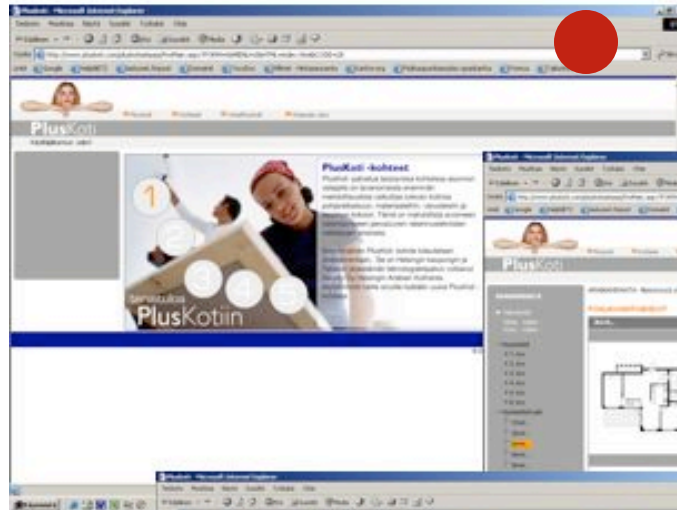


**In the  
showroom,  
making  
design  
decisions...**

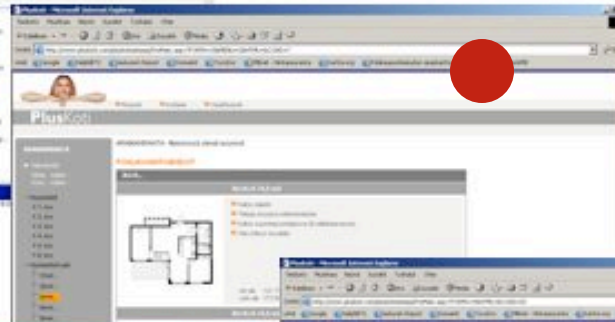


## Occupant's Internet Services

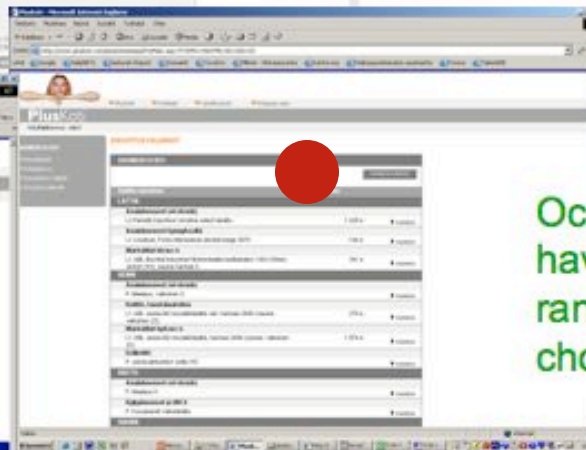
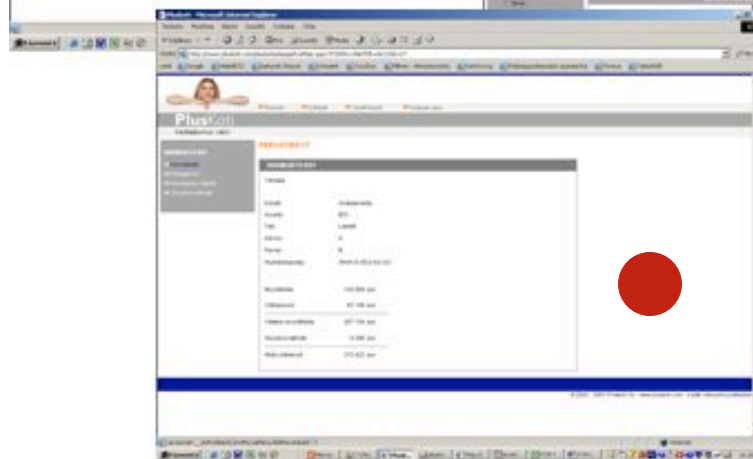
### PlusHome - Concept with wide occupants choices



Occupant's Internet front page with step-by-step guidance...



All Flat Types -  
Basic-Prices -  
Location info



Occupants  
have a wide  
range of  
choices

All-inclusive prices at once with individual choices

Kendall / Introduction to Open Building

# An internet home planner with choices and costs...

**How would an  
Integrated  
Infill Systems  
business  
operate?  
(recognizing two  
markets...)**

**..in support of consumers**



**...but in the context of private  
or societal investments**





**Several  
conditions  
must be met...**

**FIRST:**

**Separated Regulations**

**SUPPORT REGULATIONS**

**INFILL REGULATIONS**

**SECOND:**

**Separated Financing**

**SUPPORT FINANCING**

**INFILL FINANCING**

**THIRD:**

**Separate Companies**

**SUPPORT COMPANIES**

**INFILL COMPANIES**



**...at the  
distribution  
center,  
preparing  
parts ready  
to deliver...**



**...packing  
everything in  
containers  
ready for  
delivery...**



**..delivering  
the containers  
to the building  
where you will  
soon live...**





**Lifting the parts for your new house to your space...**

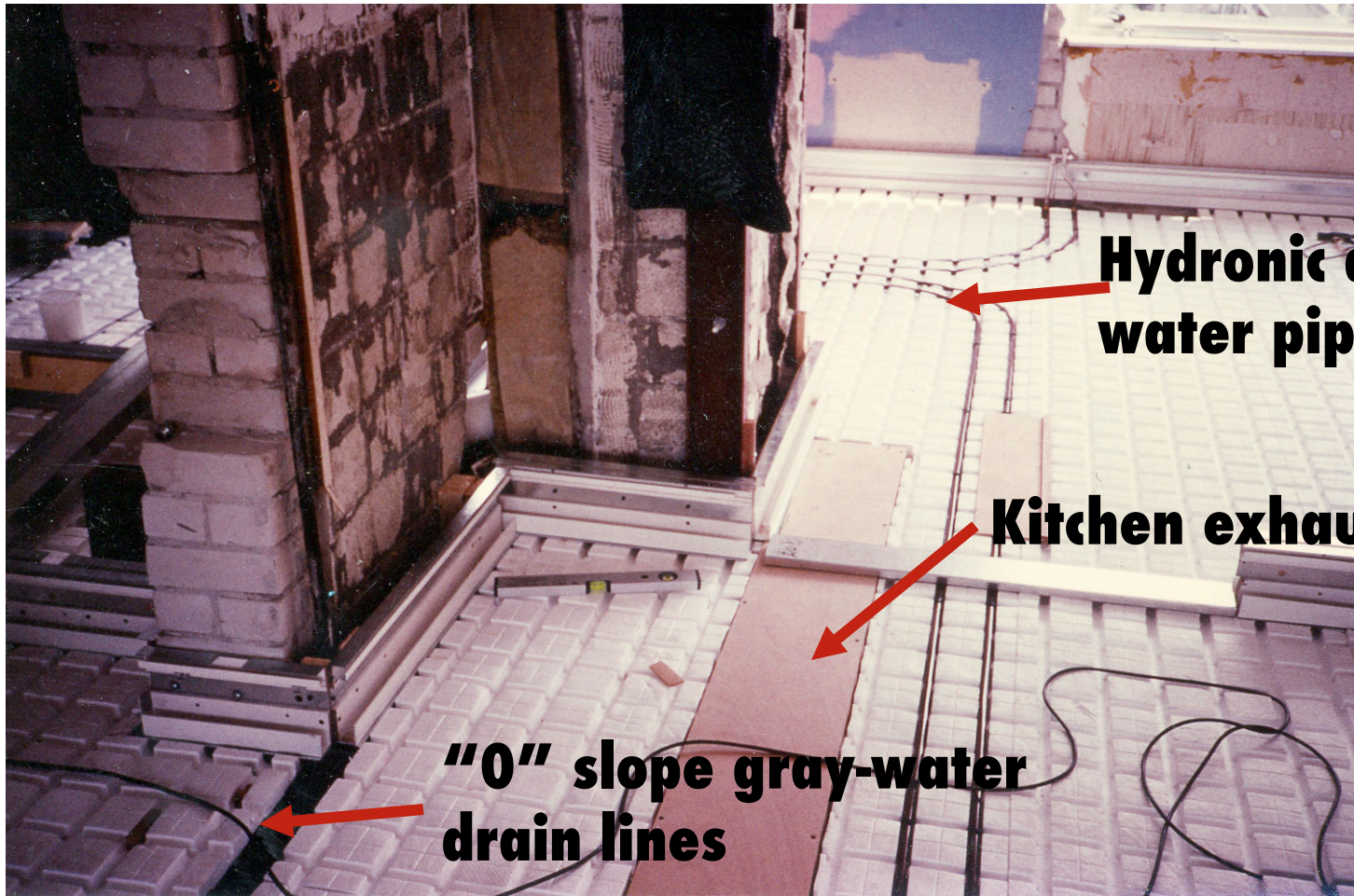


**...getting  
ready to  
unload...**





**..the multi-  
skilled team  
installs  
everything  
quickly...to  
exacting  
standards..**



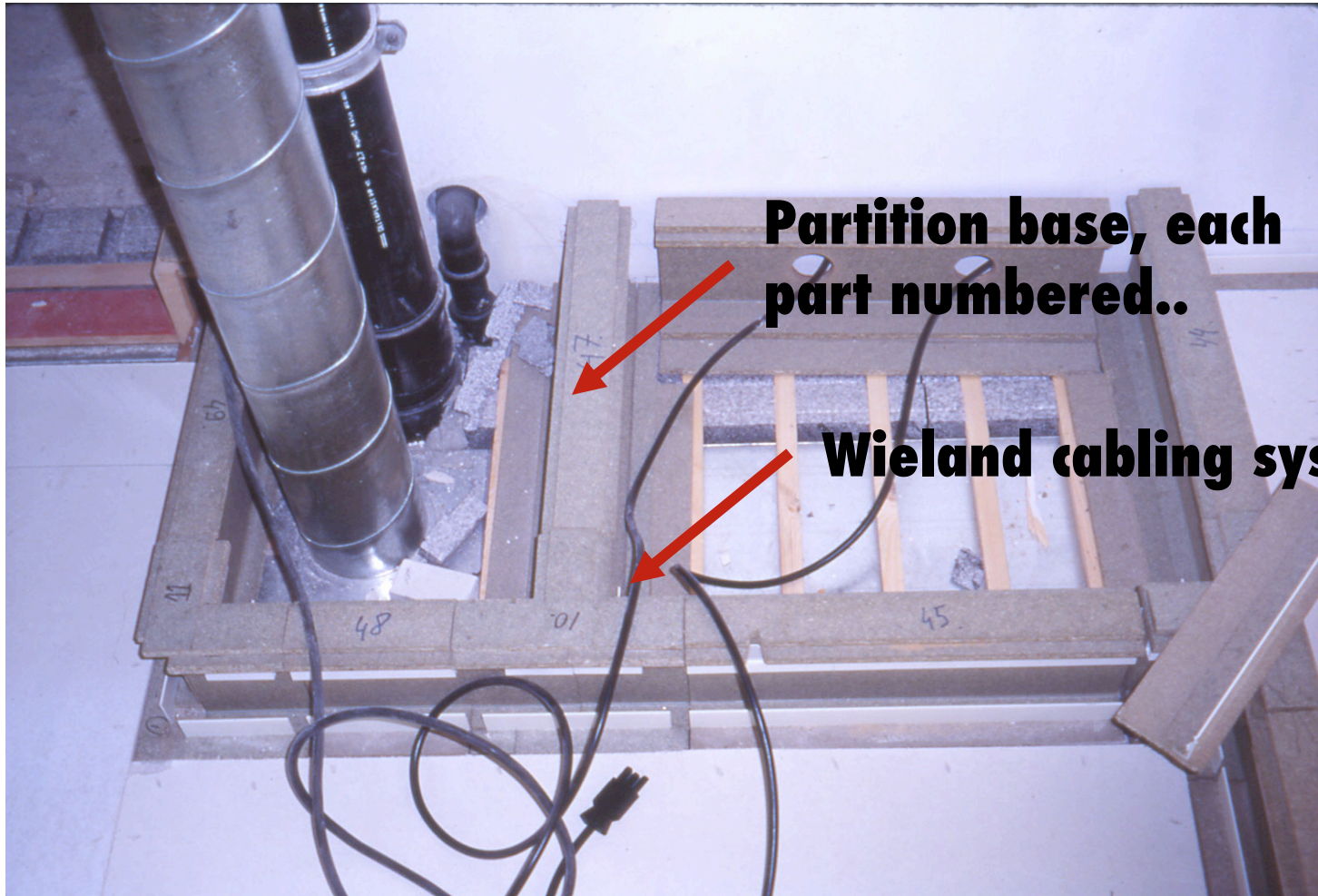
**Hydronic and domestic  
water piping**

**Kitchen exhaust duct**

**"0" slope gray-water  
drain lines**

**Installation of the "pipe floor"...**





**Partition base, each part numbered..**

**Wieland cabling system**

**Installation of the cabling...**



**I like to do  
this work ...  
maybe you  
can do-it-  
yourself,  
too!**



**Your new custom-designed apartment is ready one month after you visited the show-room...**



**Another family downstairs makes its own decisions..**



# Papendrecht, Molenvliet



Architect: Frans van der Werf, the Netherlands

**...in an open building approach, its possible to design part of the façade or outside of your home, a little differently from the next one...**



...later, a family  
extended their house to  
a third floor...

**Architect: Jan van den Brink / Developer: Heimans, the Netherlands**

**..another facade...from a library of parts...**

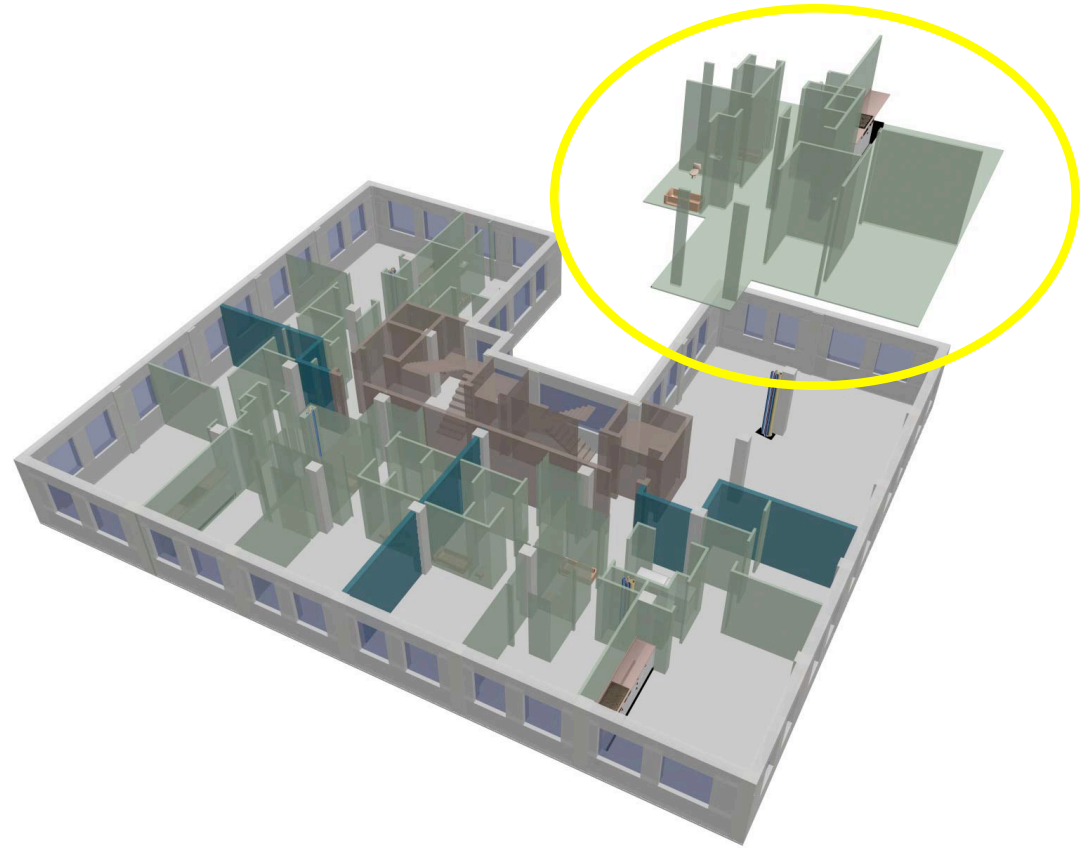


**THE SOLIDS / HET OOSTEN Development, Amsterdam  
Baumschlager and Eberle, Architects**

**..but a fixed façade is also possible...where users'  
choice is limited to what is behind their front door...**

??

??



**The idea of an INFILL INDUSTRY - with many competitive players - is the key point...**

# **Some lessons from these cases**

**About territory**

**About capacity**

**About technology**



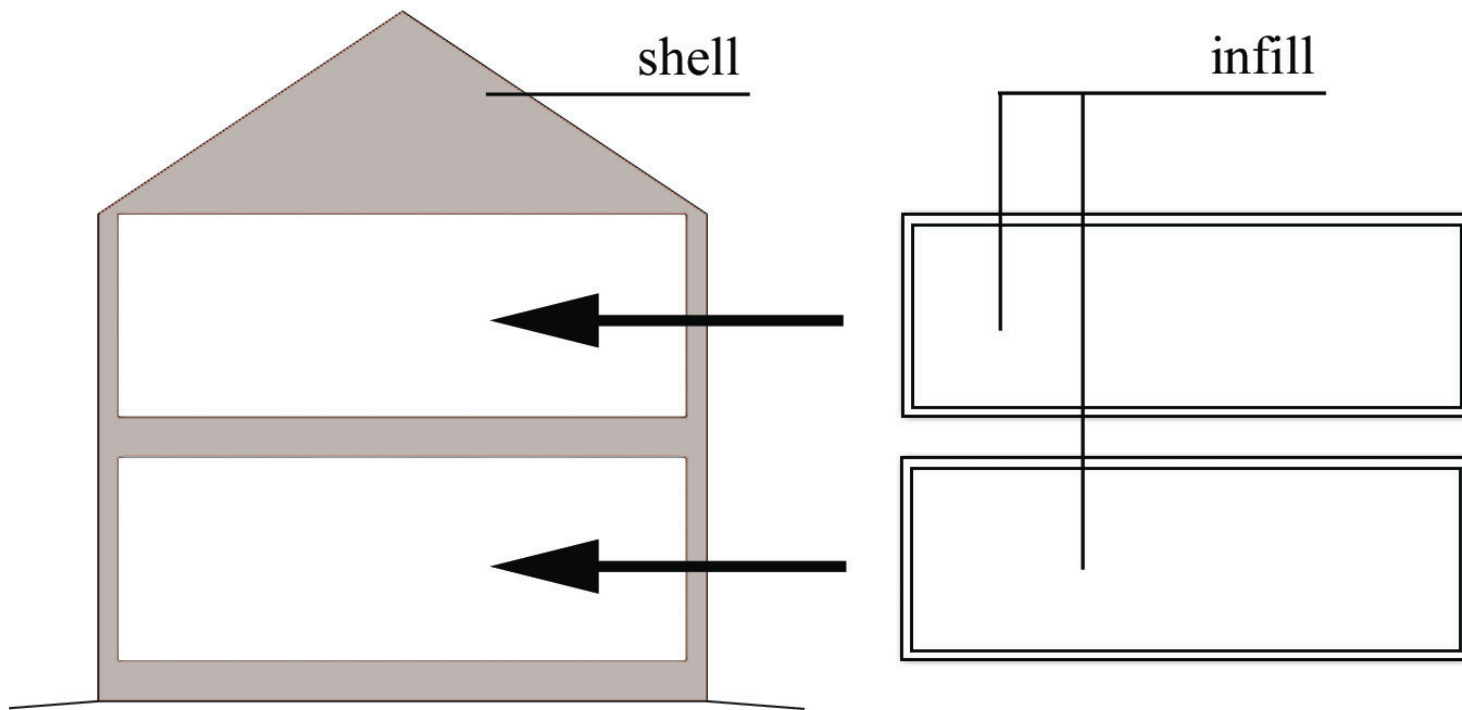
# TERRITORIAL BOUNDARIES

Handling the margin between public and private – vertical relations

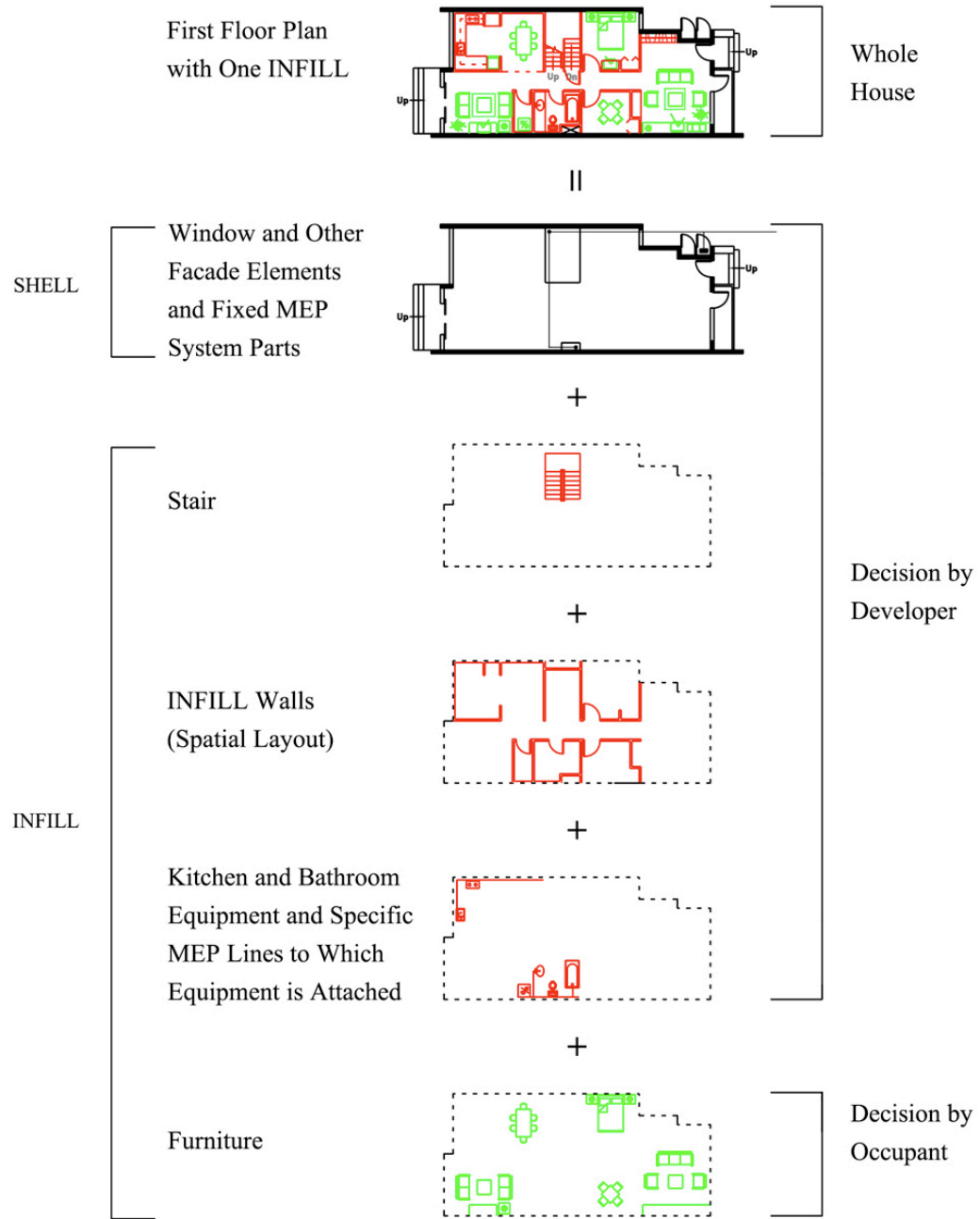


# DISTINGUISHING SHELL AND INFILL

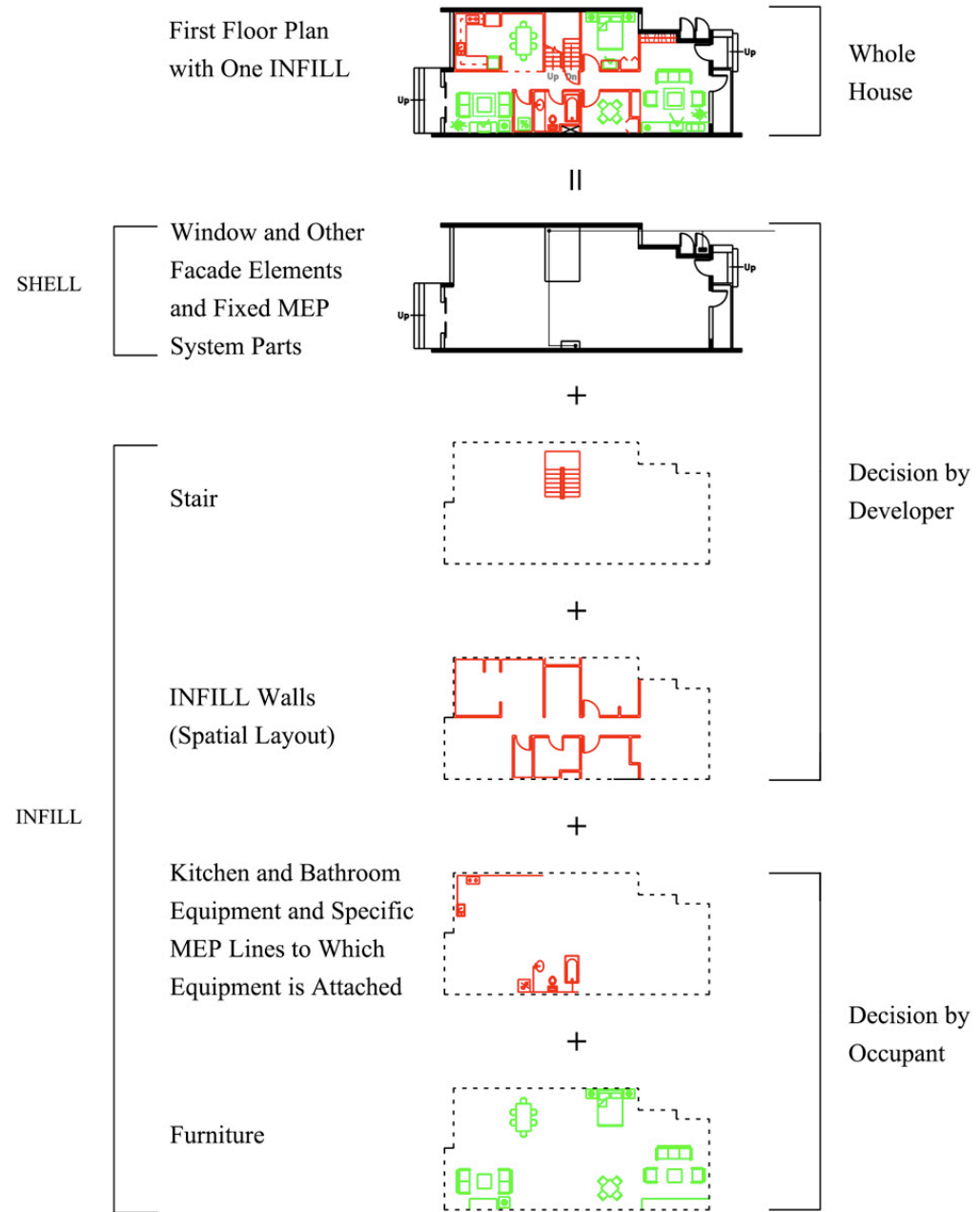
- A shell is long-lasting and is more public
- infill is more personal and of shorter life-span in general



# CAPACITY



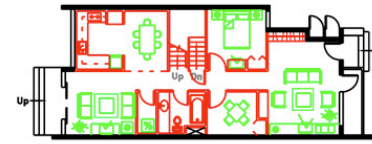
# CAPACITY



Architecture on the Time Axis

# CAPACITY

First Floor Plan  
with One INFILL

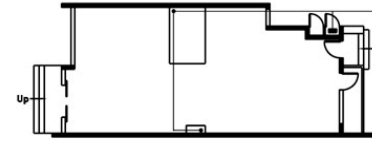


Whole  
House

||

SHELL

Window and Other  
Facade Elements  
and Fixed MEP  
System Parts



Decision by  
Developer

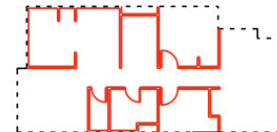
+

Stair



+

INFILL Walls  
(Spatial Layout)



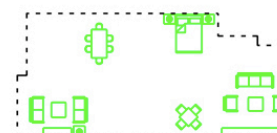
+

Kitchen and Bathroom  
Equipment and Specific  
MEP Lines to Which  
Equipment is Attached



+

Furniture

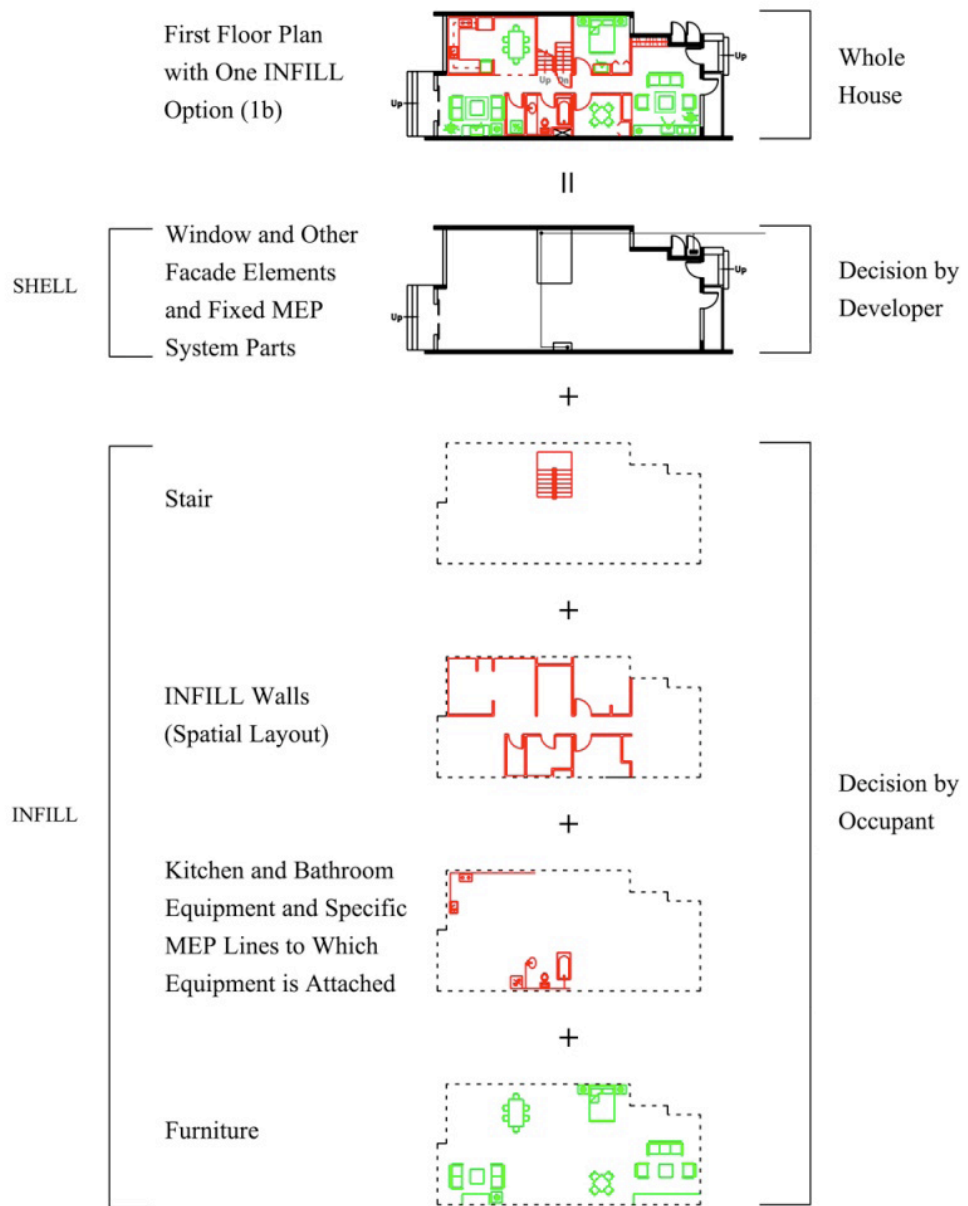


Decision by  
Occupant

Architecture on the Time Axis

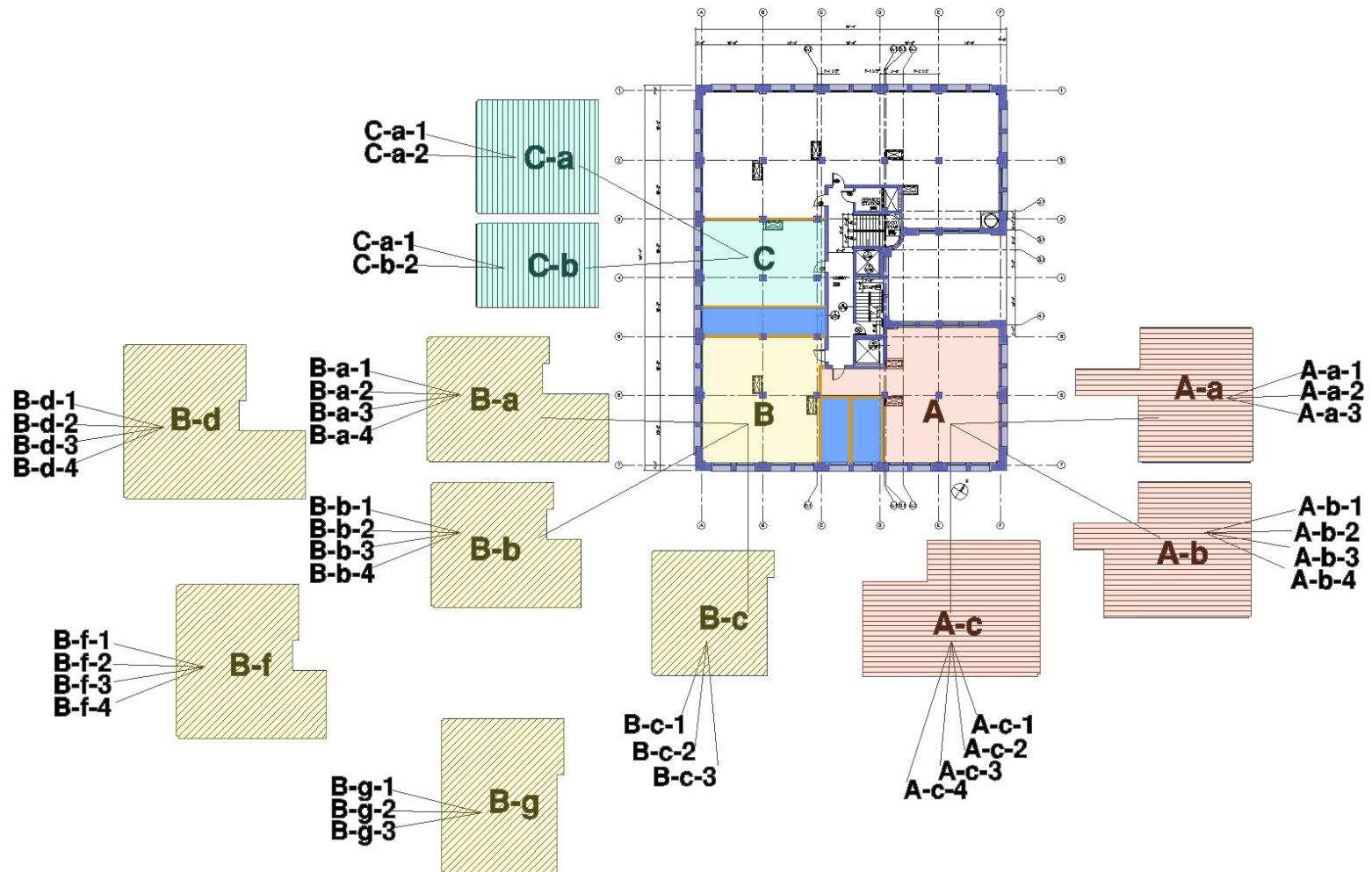
# CAPACITY

## SCENARIO A



# CAPACITY

## And horizontal relations of territory



# Technology

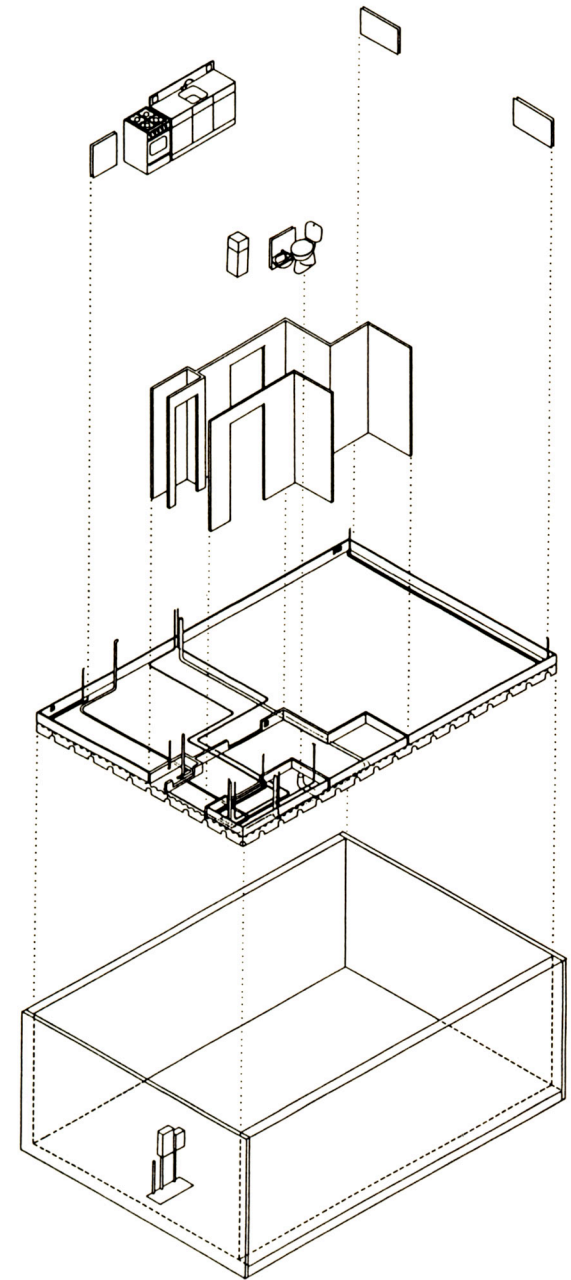


**NEXT INFILL / Japan**

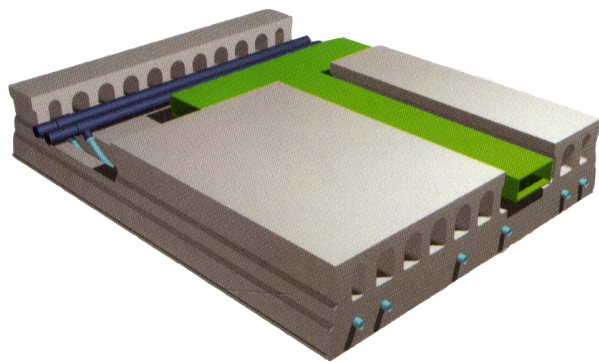




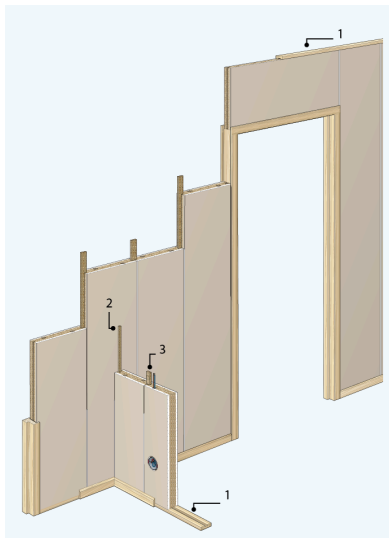
**MATURA / the Netherlands**



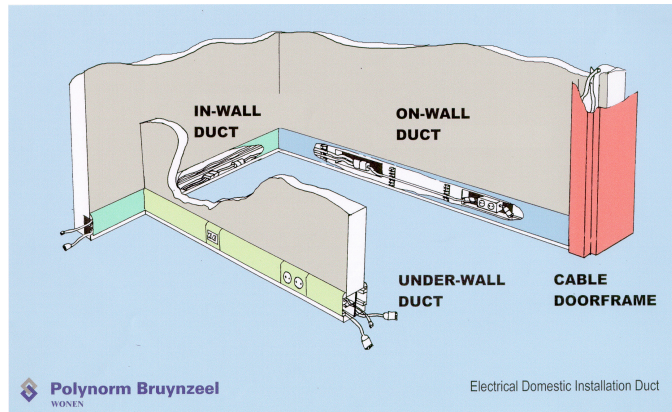
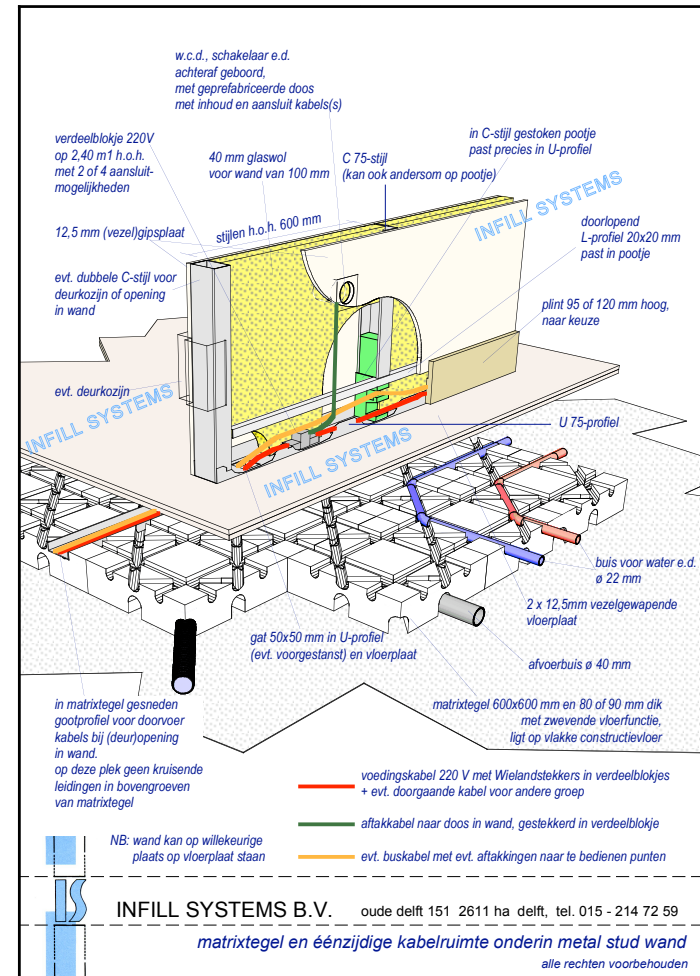
# New technical products



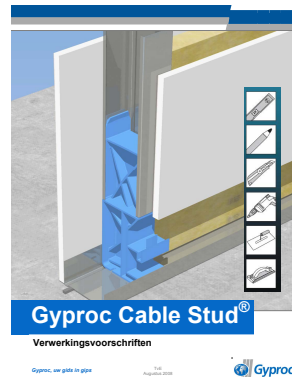
**FlexCasco Base Building System**



**Faay Fit-out Wall System**



**Polynorm / Bruynzeel**



**Gyproc Cablestud + Infill System Matrix Tile**

## More technical products



**Hepworth in-line trap self-sealing waste valve and flexible piping system**

Een lege ruimte als uitgangspunt voor een droom van een badkamer!

Klantgericht denken is werken aan succes!

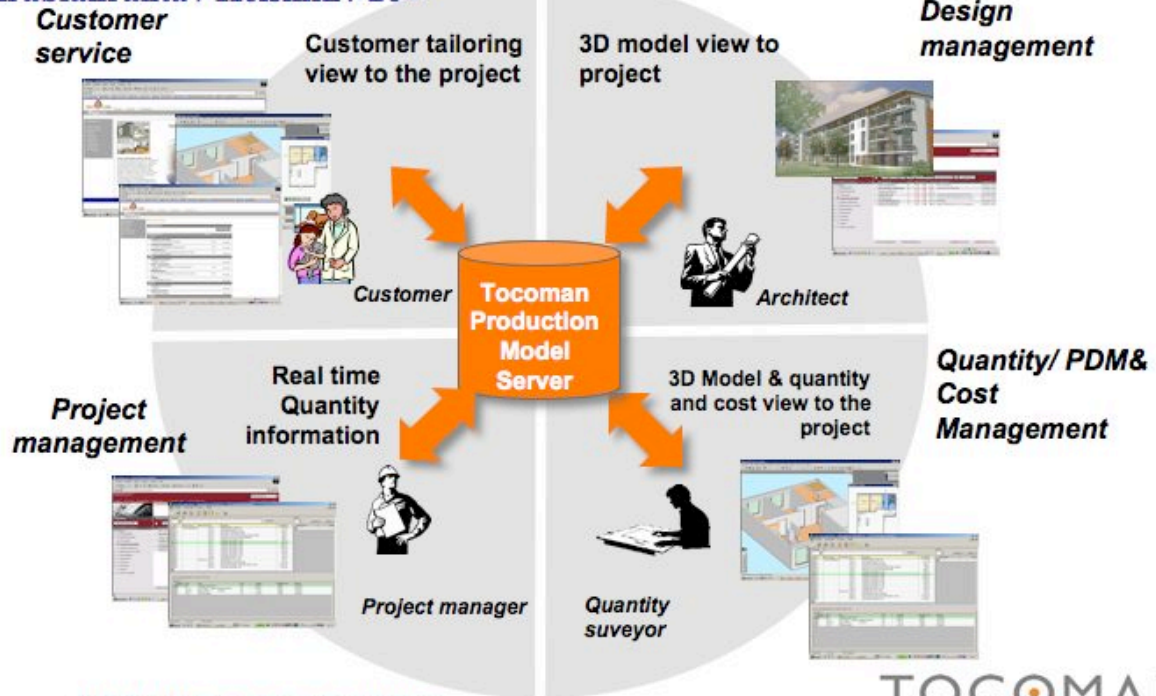
**GEBERIT**  
Systeem in sanitair

The advertisement features a vertical strip of six small images showing the progression of a bathroom renovation. The first image shows an empty room with a tiled floor and a wall. The second image shows the room with a shower tray and a toilet. The third image shows the room with a shower tray and a toilet, and a sink. The fourth image shows the room with a shower tray, a toilet, and a sink. The fifth image shows the room with a shower tray, a toilet, and a sink, and a bathtub. The sixth image shows the room with a shower tray, a toilet, and a sink, and a bathtub, and a shower tray. The text 'Een lege ruimte als uitgangspunt voor een droom van een badkamer!' is at the top. The text 'Klantgericht denken is werken aan succes!' is on the right. The GEBERIT logo is at the bottom right.



## PlusHome Total IT process

Arabianranta / Helsinki / 2004



Kendall / Introduction to Open Building

TOCOMAN

??

??

**The problems are not only technical...there are also problems of IT, logistics, regulations and finance...**

??

??



**...the profit opportunities are very large**

??

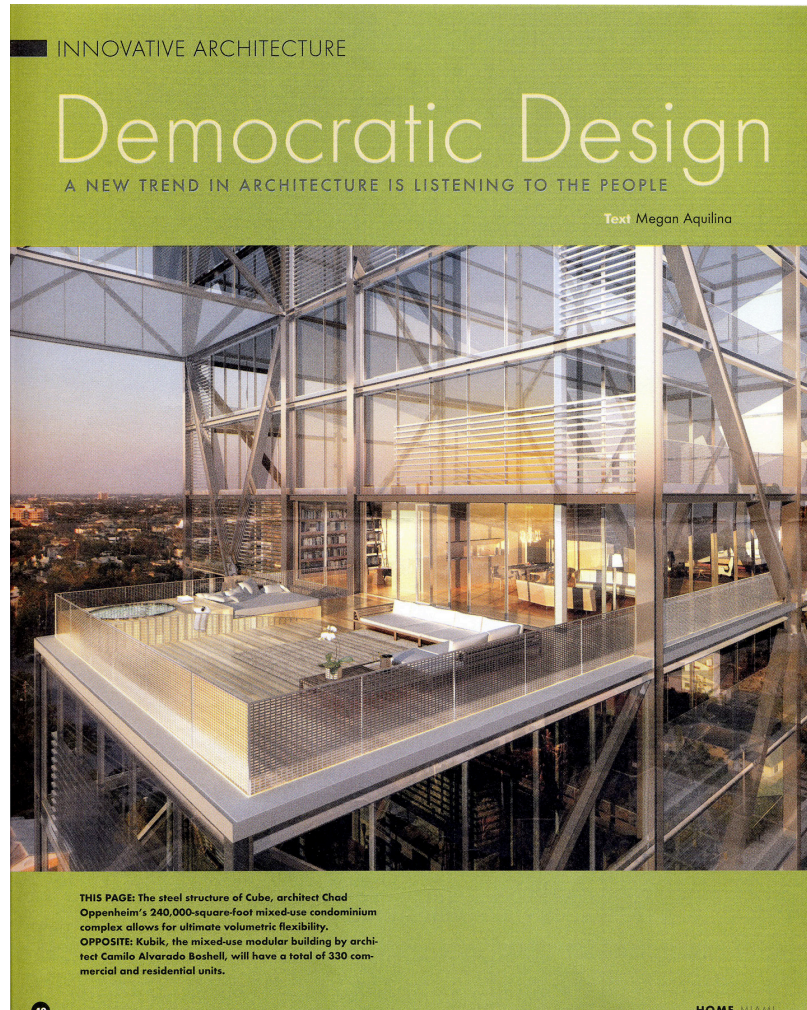
??



**....we build BASE BUILDINGS to last a long time,  
while FIT-OUT continues to come and go...in a  
continuing process....**

??

??



**How will this image of OPEN BUILDING and a FIT-OUT INDUSTRY take shape in the future?**

**Let us not forget the individual household especially when we have large projects to design!**

**Since we cannot know who will live in the building, we cannot design dwellings.**

**But we can make an architecture with capacity.**

