















Construction Applied to Heritage





3rd Semester

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Construction Applied to Heritage

3 ECTS



Sustainable Heritage



Elective Courses











Construction Applied to Heritage



Sustainable Heritage



Elective Courses

- Foundations.
- Retaining Works.
- Drainage and Sewerage Systems.
- The Porous Loadbearing System.
- 5. The Porous Loadbearing System. Walls.
- The Porous Loadbearing System. Grid Structures.
- 7. The Compact Loadbearing System.
- 8. The Porous and Mixed Horizontal Loadbearing System. Slabs.
- 9. The Porous and Mixed Horizontal Loadbearing System. Grid slabs.
- 10. Roofs.
- 11. Sloping Roofs.
- 12. Flat Roofs.
- 13. Façades. Porous System. Ventilated Façades.
- 14. Façades. The Compact System. Curtain Walls.
- 15. The Internal Partitioning Layout. Construction Process.





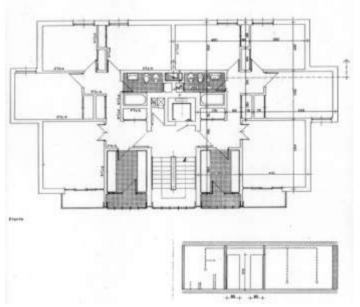






Construction Applied to Heritage

3 ECTS



15 THE INTERNAL PARTITIONING LAYOUT. CONSTRUCTION PROCESS.







- The concept of internal partitioning; partitions and insulation; hygrothermal and acoustic.
- The typological concepts of internal compartmentation.
 Stability and structural resistance. Collaborating systems.
 Interaction between building structure and building enclosures.
- •Deformability. Elements compatibility (mechanical, chemical, dimensional). Durability. Fire resistance. Safety of use.
- •The construction process. Stability and continuous structural resistance. Deformability. Partial processes.

FUNCTIONS

- They are ordinatory walls, for subdivision of spaces or acting in compartmental function.
- They are conditioning walls, for all kinds of comfort, even visual acting in accompanying function
- Always without structural function. Adaptable. Its location is not immovable.
- Mostly indoors.
- Privacy.
- Intrinsic resistance, Slams.
- Stability. Wind when windows are open.
- Thermal and acoustic insulation (thickness, with finishes ≥6 cm).
- Admit embedded installations (for Ø ≥2cm, thickness ≥10cm).
- Attenuate the noise transmission (to annul airborne noise, to attenuate noise from impact)
- Fire resistance.

Proportional costs in every case:

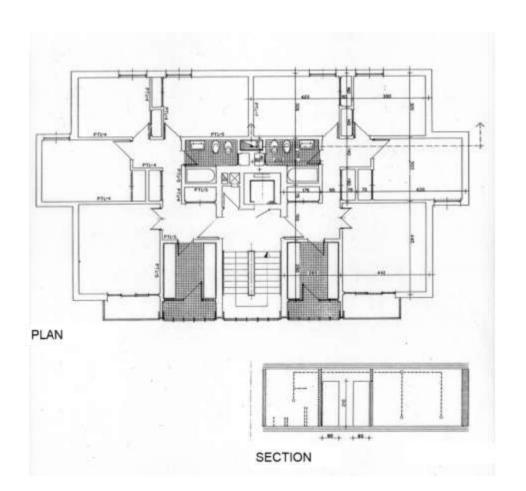
- Durability / economic maintenance / cleanliness.
- Modifiability
- Nailing possibilities. Support of suspended loads (sanitary ware, furniture).
- Relationship with slabs and structure.

PARTITIONING EXECUTION SYSTEM

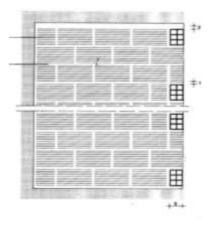
- HUMID PARTITIONS
 - o "On-site"
 - Panels
- DRY PRODUCTS
 - Components
 - Semi-products
- SUBDIVISIONS
- Fixed masonry partitions
- Fixed modular partitions
- Movable partitions
- Transformable partitions

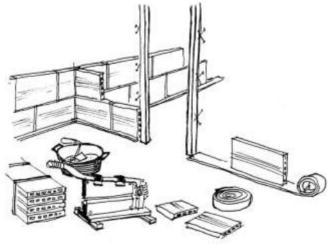
PARTITIONING COMPOSITION

- LOADBEARING ELEMENT
 - Massive
 - o Double layer
 - o Laminar
 - o In frames
- CONFIGURATION
 - o Single layer
 - o Double layer
- COATING & FINISHING



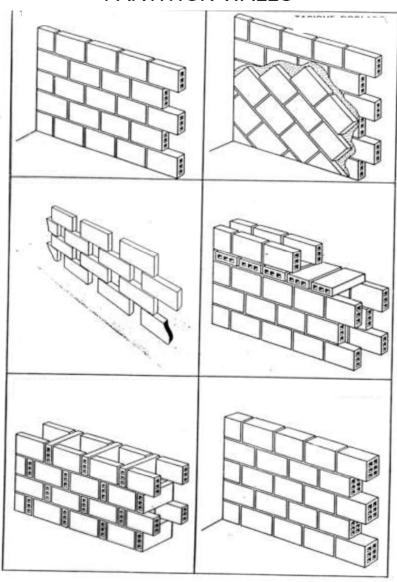
WET PARTITIONS "ON-SITE"



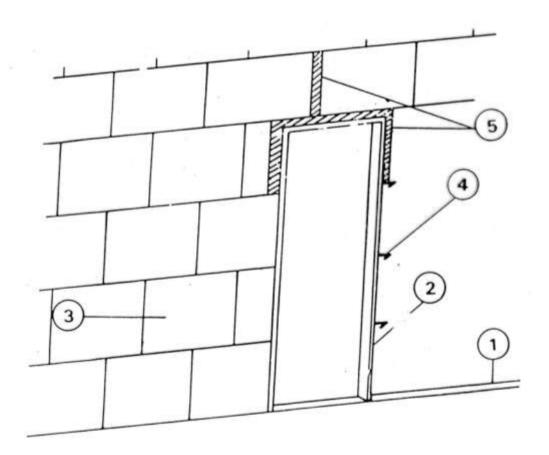


WET PARTITIONS "ON-SITE"

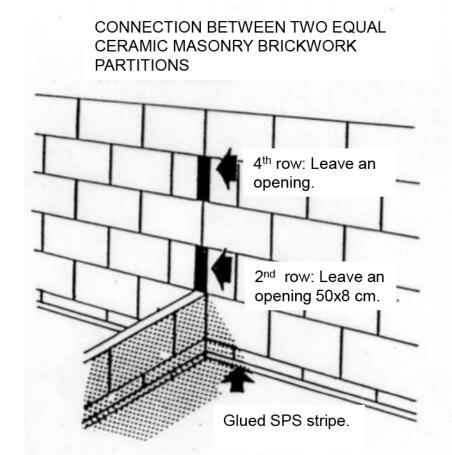
PARTITION WALLS



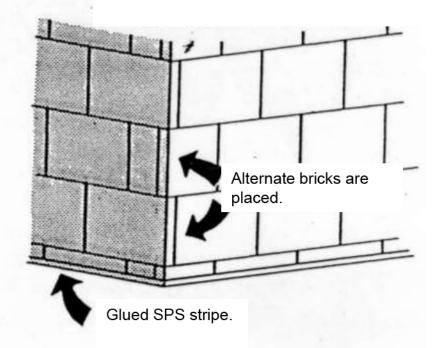
- 1. Presoelastic stripe of glued cork.
- 2. Frame.
- 3. Plaster plate.
- 4. Glasses-shape frame.
- 5. Glued expanded polystyrene stripe.



CONNECTIONS BETWEEN PARTITIONS



CORNER CONNECTION BETWEEN TWO EQUAL CERAMIC DOUBLE HOLLLOW BRICKS MASONRY BRICKWORK PARTITIONS



FIXED CONNECTIONS BETWEEN PLASTER-BRICK PARTITIONS AND PAVEMENT

CONNECTION TO THE CEILING

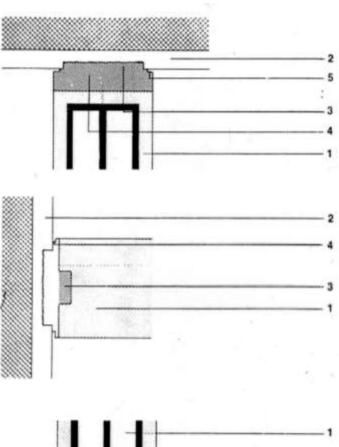
- 1.Plaster-brick panel
- 2.Wall
- 3. Plaster and glue sealing
- 4.Plaster

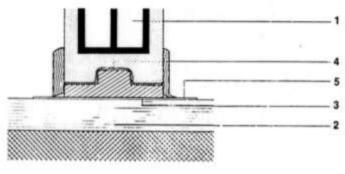
CONNECTION TO LATERAL WALL

- 1.Plaster-brick panel
- 2.Finished masonry wall prepared with base plate
- 3.Glue sealing.

PLACEMENT ON THE FINISHED FLOOR

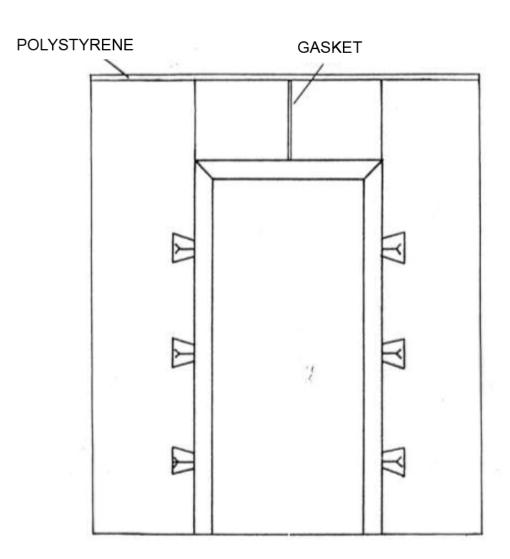
- 1.Plaster-brick panel
- 2.Finished floor
- 3.Plaster and glue filling
- 4. Skirting board



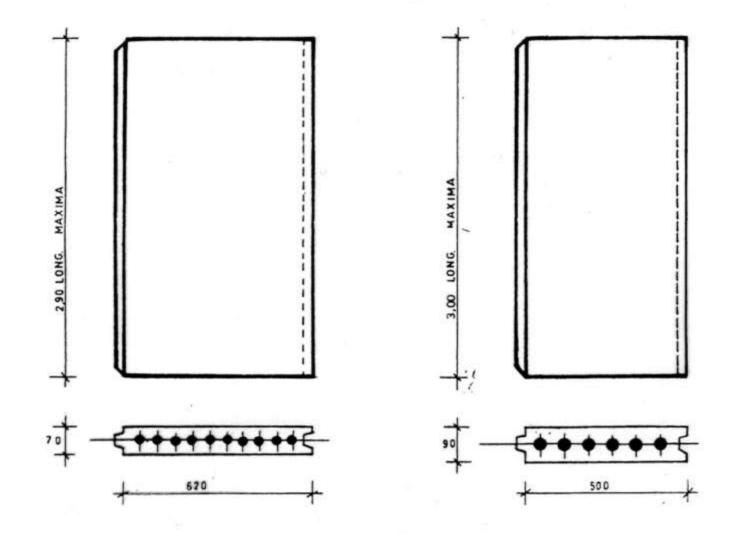


DETAILS

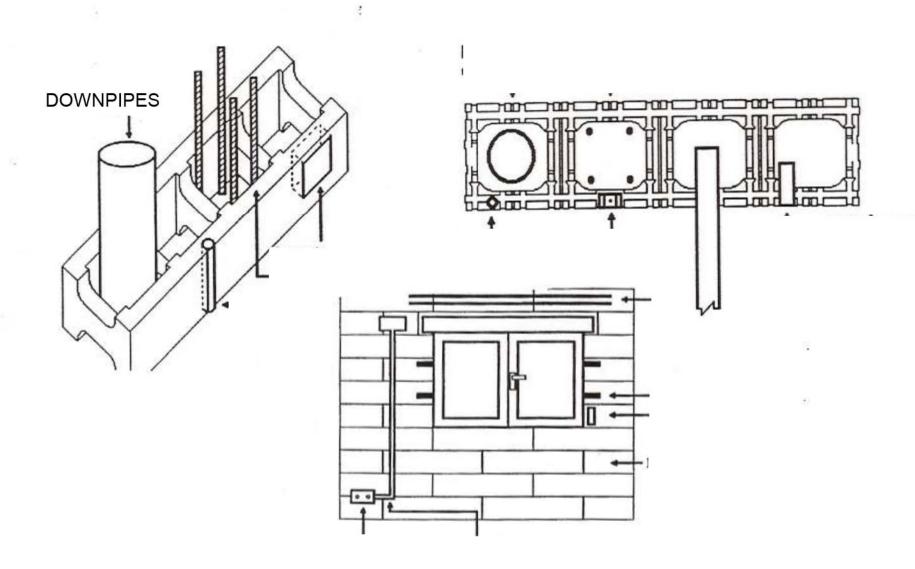
FLOOR TO CEILING CONNECTION DETAILS Detail of the execution of the door lintel.



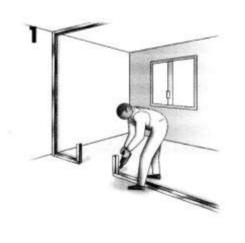
GEOMETRICAL CHARACTERISTICS



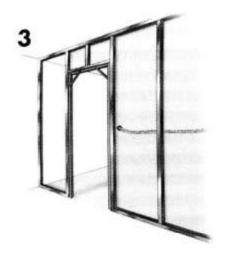
INTERACTION WITH FIXTURES

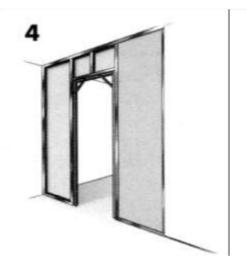


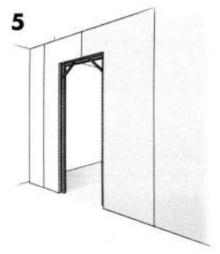
PLASTERBOARD





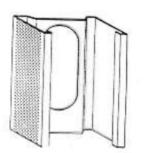


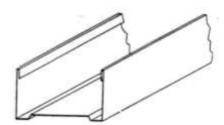




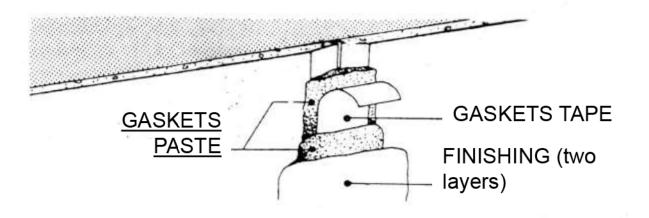


PLASTERBOARD

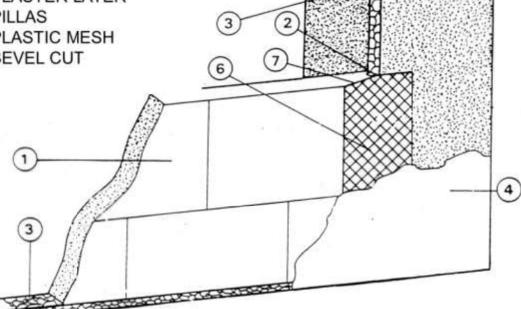








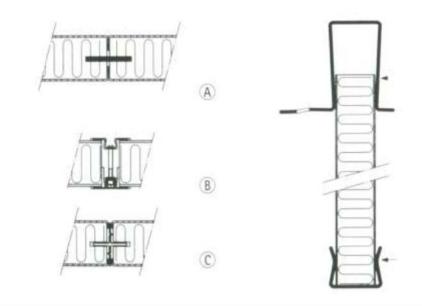
- PLASTERBOARD
- 2. BONDING
- 3. GLUED CORK ELATICAL LAYER
- 4. PLASTER LAYER
- 5. PILLAS
- 6. PLASTIC MESH
- 7. BEVEL CUT



(5)

INSULATION PANELS FOR INTERNAL PARTITIONS





Joints between panels:

A. Fixed union. I-section profile (tongue).

B. Removable joint. Screwed omega section profiles.

C. Detachable union. Cross section profile (double tongue). Mounting of the modular element on the floor and ceiling channel profiles.

GLASS BLOCKS.

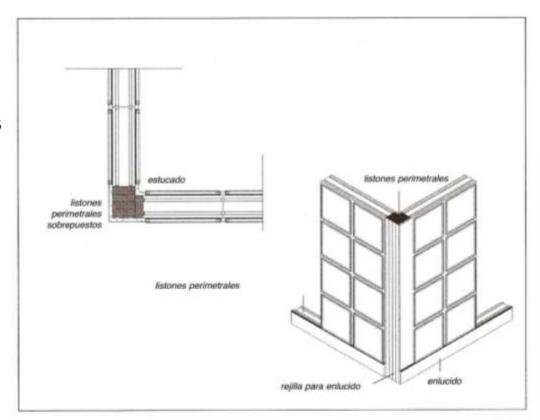
VERTICAL STRUCTURES. PROJECT AND INSTALLATION

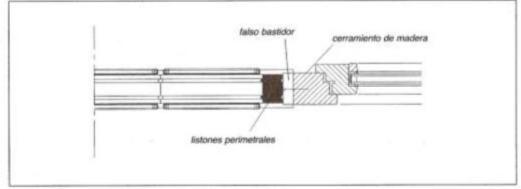
TECHNIQUES

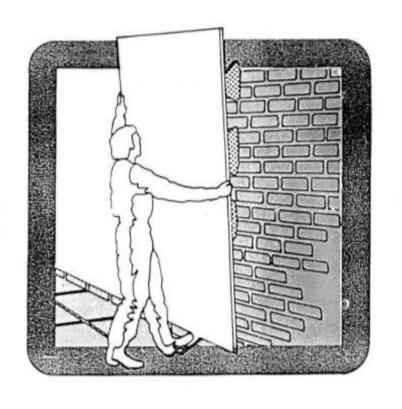
Corner unions

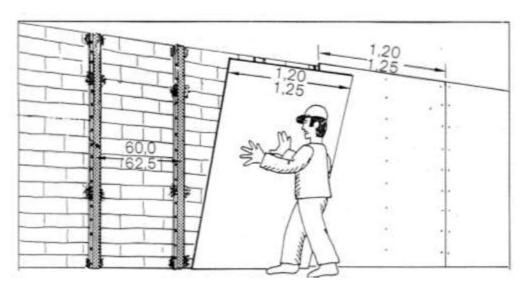




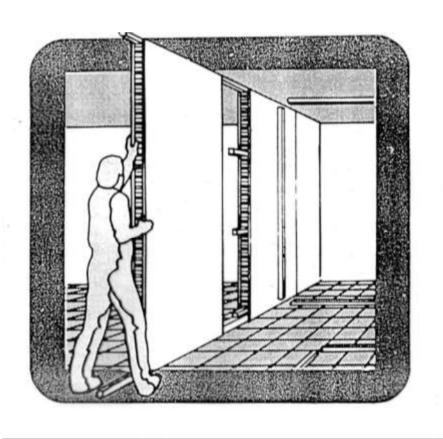


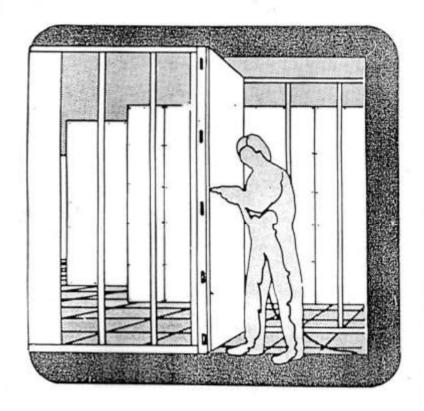






INTERNAL CLADDING

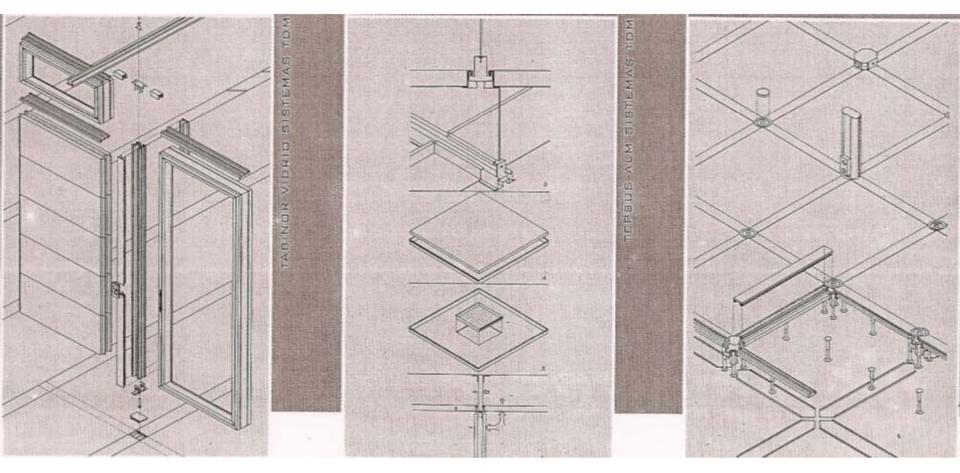




MOVABLE PANELS

COMPARTMENTALISE. DRY SYSTEMS





















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