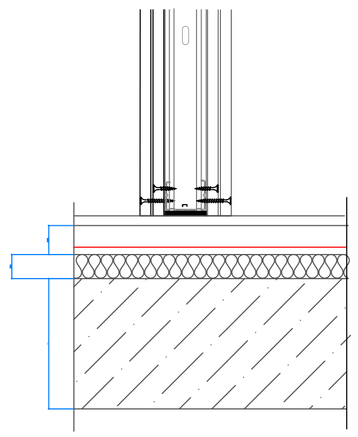
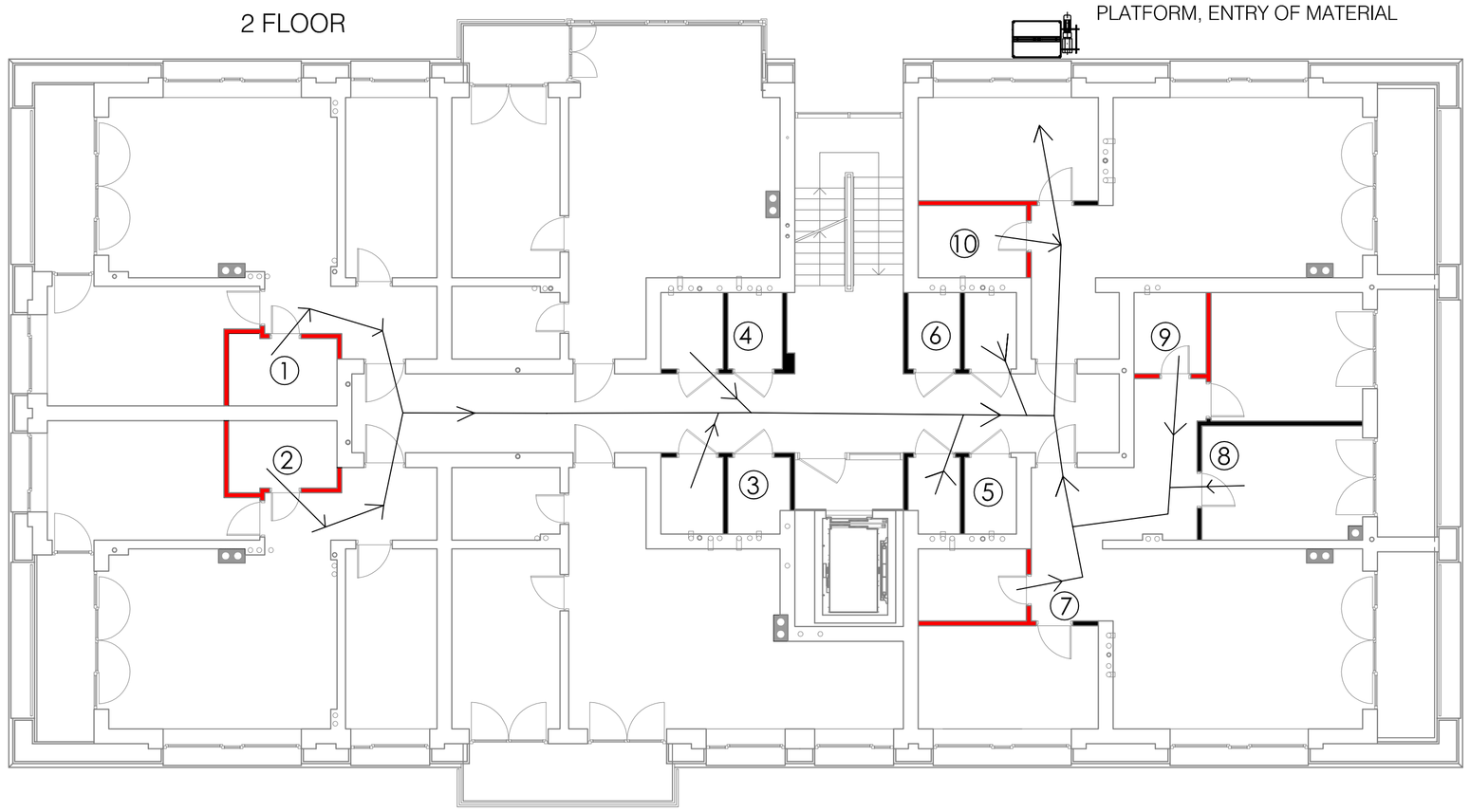
TECHNOLOGICAL CARD PLASTERBOARD

Detail of normal plasterboard wall with floor



2 FLOOR

PLATFORM, ENTRY OF MATERIAL



1.PLASTERBOARD PARTITIONS

Plasterboard partitions are composed of a metal frame and gypsum board screwed to each side. The metal frame is attached to the original construction and constitute a support for mounting plates.

For special cases you can use a double structure with adequate separation. In the gap between the plates can be placed a fiberglass or rock lada for greater thermal and acoustic insulation and for fire protection.
Furthermore, in the gap can perform the necessary facilities （electric, sanitary etc.）.

Structure
- Rail 48, 70 or 90 mm. Firmly attached to the floor and roof.
- Upright vertical 48, 70 or 90 mm. Introduced into the lower and upper channel separation of 400 or 600 mm. As needed.
- Start and end uprights fixed to the structure of encounter.
- Other free intermediate uprights, without setting the upper and lower canals.
- In double grid walls when these are separated more than 5 mm., Arriostrarlas with gusset plates 300 mm.
- To stitch height uprights, you can use one of the following three methods:

a) A piece of a canal to the studs.
b) A piece of upright In a drawer two arriving
c) Insert a stud into another （as drawer）

Materials needed:
Plasterboard
canals
uprights
Acoustic band
screw TN
fixings
Grab Pasta Knauf Perfix
Pasta EJS Meeting
Meeting Tape

Personnel needed:
1 Oficial of construction
Regular worker

3.TECHNICAL ECONOMICS INDICATORS

NORMAL PLASTERBOARD
Quantity of works: 70.7 m2
Installation costs: 3501.48 € = 12080.06 LTL
Duration of works: 3.53 days/floor ≈ 4 days/floor
Wage of 1official of construction: 3.53 x 8 h = 28.24 h -- 28.24 h x 21.8 € = 615.63 € or 2123.92 LTL
Wage of peon of construction: 28.24h x 20.83 € = 588.23 € or 2029.39 LTL

WATERPROOF PLASTERBOARD
Quantity of works: 25.93 m2
Installation costs: 1.521.83 € or 5250.31 LTL
Duration of works: 1.29 days/floor ≈ 2 days/floor
Wage of 1official of construction: 1.29 x 8h = 10.32 h -- 10.32 h x 21.8 € = 224.97 € or 776.14 LTL
Wage of peon of construction: 10.32 h x 20.83 € = 214.96 € or 741.63 LTL

2.CONSTUCTION PROCESS

1. Stakeout

2. Installation of the structure:
If possible, the lower rails are installed on the flooring completed or on your seat base and the higher will be placed by usually upon completion of the roof plate or forged under once plaster.
The seat rails are held by a tight band. With this simple operation will achieve a significant gain in thermo-acoustic insulation.
Once reframed the wall in floor and ceiling shall be set "Rails", which can be anchored to the support （screed or forged） by means of expansion bolts or rivets, spaced a maximum of 800 mm.
Then you will have the "pillars" supporting elements vertical, which is accommodated between the wings of the channels using a rotary motion. The wheelbase is stud a maximum of 600 mm and provided with multiple of the width of the plate.
The sums to be screwed to the rails except for the boot in transit openings, windows and other very singular so required.

3. Transit openings:
When the partition coincides with a hole （either door or window）, the modulation of the studs will not be lost, but is maintained, placing the stiles and rails as well as a precerco.

4. Installing the plate:
Plates shall have a height equal to the span between floor and ceiling, least 1 cm. Be supported on the supporting structure so that the upper edge of the plate is "butt" with the top floor, plastering whether you are or not. In this way the clearance of 1cm. remain in the bottom and will be covered subsequently by baseboard.
Once the plate in position on one side of the structure, proceed to screw （first face）, while meeting the distance between bolts does not exceed 250 mm. In case of partitions laminates （layers）, the first plate Is fixed to the structure maximum equidistant screws 700mm.
The joints of the plates of a wall face of ever coincide with the other. In the laminates of two or more boards, the boards are alternate. The side plates will butt or up to 3mm.

5. Placement of isolation and passage facilities:
The electrical and plumbing facilities fro within the saving camera studs through the holes provided in them. The studs are supplied with pre-drilling side to facilitate the transition of facilities （pipes and electricity plumbing）. The electrical conduit boxes have to be fully subject to the board, for the purpose recommended installing pin boxes.

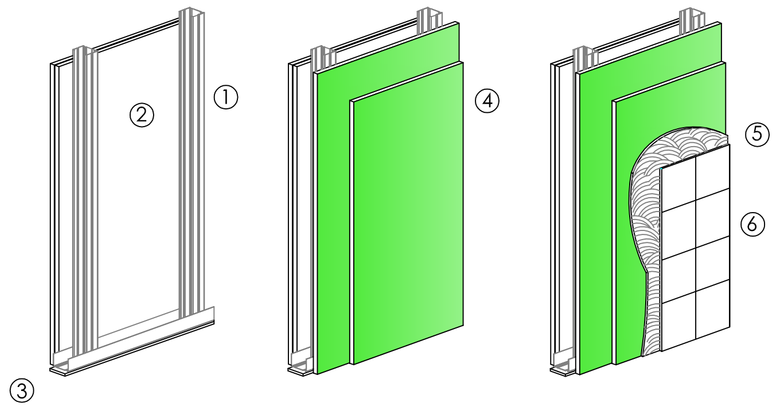
6. Installing the plate （second side)

7. Completion of the septum. Joint treatment:
Continuity and finish of the walls is done by treating the joints between plates and liquid gasket tape or tape and paste finish. Also apply paste to the head of the screws. Subsequently, if necessary, be held sanding boards to achieve desired flatness before painting. It is important to coordinate the work done so that the joint treatment is appropriate as soon as possible to your decor. The surface of the plates, exposed for some time to sunlight, direct or indirect, can discolor the plate further hampering painted.

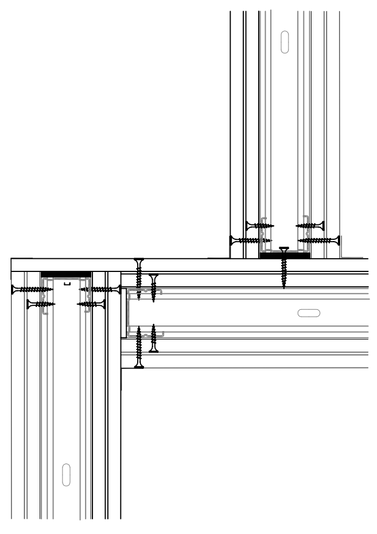
4.MECHANICS, MATERIALS AND TOOLS

NAME	UNIT	QUANTITY
MACHINES		
drill screw	u	1
MATERIALS		
plasterboard normal 12.5 mm	m2	304.01
waterproof plasterboard 12.5 mm	m2	111.5
canal rail 30x48x0,6 mm	m	56.56
upright 46x36x0,6 mm	m	233.31
screw 25 mm	u	2121
screw 45 mm	u	1414
microperforated paper band	m	190.89
joiting paste	kg	71
TOOLS		
hammer	u	1
level	u	1
spatula for joints	u	1

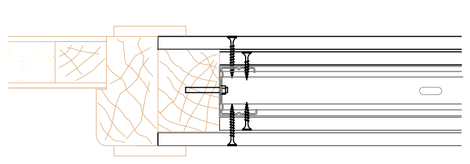
3D OF WATERPROOF PLASTERWALL



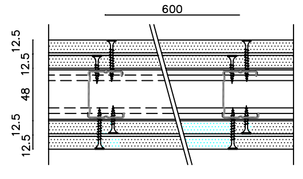
Detail of encounter and corner



Detail of plasterboard wall with door

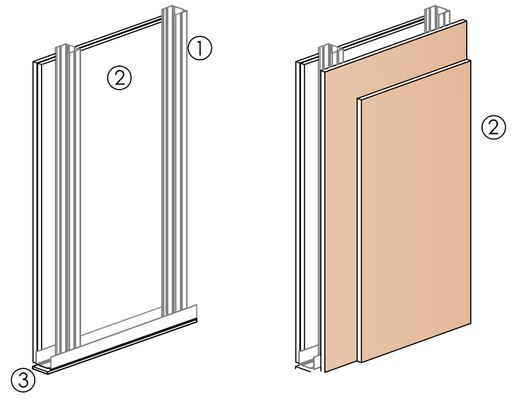


Detail of normal plasterboard wall



PLACEMENT OF PLASTERBOARD

3D OF NORMAL PLASTERWALL



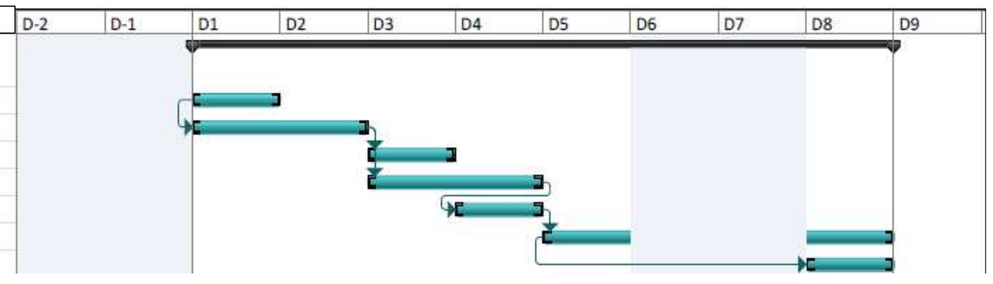
① Lattice from galvanized steel
② Locked plasterboard plates
③ Neoprene band
④ Locked plasterboard plates with water repellent
⑤ Adhesive bonding cement
⑥ Porcelain stoneware tiles

5.HUMAN SAFETY

The works are not qualifeid as dangerous, the workers only have to wear work clothes, gloves, work boots, and helmet. If they have to cut the plasterboard or another materials, they must wear protective glasses. And they must to check if all electrical parts are in good conditions and grounded. The place of work must be clean.

7.ORGANIZATION OF WORKS

Id	Activity	Duration
1	**plasterboard partitions of second floor**	**6 días**
2	stakeout	1 día
3	installation of structures	2 días
4	transit openings	1 día
5	installing the 1 plate	2 días
6	placement of isolation	1 día
7	installing the 2 plate	2 días
8	joint treatment	1 día



6.QUALITY CONTROL

The most important control is to check that the stakeout is correct before starting the installation of structures. We must check that the dimensions are right. After that, we should check that the materials are of good quality and if is in perfect conditions. Finally we will check that the finishes are correct.

Tolerances on the execution and completion of systems Gypsum Laminated
a) Setting out: Errors may not be greater than + 20 mm. not cumulative.
b) Appearance: The surface finish should allow the application of decorative coatings, as shown in section finishes.
c) local flatness: A rule of 200 mm., Applied over the facing surface in all directions and especially along the joints, can not detect the zone between outgoing and the incoming one dimension more than 1 mm., or abrupt changes of the plane.
d) General Flatness: A rule of 2,000 mm., Applied on the surface of the facing in either direction, can not detect between the zone more outgoing and incoming an upper bound to 5 mm.
e) Crash: The maximum allowable slump in a partition or cladding to a height of 3,000 mm. will not exceed 5 mm. in units with different heights, this should be discussed with the manufacturer's Technical Services.
f) Horizontality: Standard deviation of the plane of reference is less than 3 per thousand, but not to exceed 2 cm.

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