

## Instructions for building with Promonta gypsum blocks

Promonta has made a selection of several professional teams specialized in implementing its products. Those teams ensure an excellent work strictly following the building scheme set up by Promonta. This is extremely important moreover when it goes about acoustic walls where every single detail of implementation requires a particular attention in order to reach sound standards.

Promonta has built long lasting trustful partnerships whit each of these companies. Being so close to them gives Promonta the opportunity to immediately react in case of problem. The satisfaction of our clients in terms of finished aspect of our product is a constant concern.

### TRANSPORT, STORAGE AND BUILDING TEAMS

The blocks must be delivered on pallets and wrapped into plastic bags in order to protect them from water and moisture during transportation and storage. Building work is preferably done once the structure is weathertight.

The pallets are brought to the construction site in function of planning of deliveries. Delivering schedule is to fix in coordination in order to avoid any delay.

The pallets are delivered by trucks on sites on a wide surface enough to unload.

After reception of the final plans, the building teams will proceed to the calculation of the pallets to deliver and will give it to the responsible of the construction site. Therefore the foreman will be able to order the exact number of pallets per floor.



## PREPARATION OF THE SURFACE

After the base floor has been cleaned and set out the required number of profiles should be positioned between floor and soffit. The walls will about these profiles.



## PREPARATION OF THE ADHESIVE

The gypsum Promontine powder is mixed with clean water until homogenous slurry is obtained after about 3 minutes. The consistency of the slurry must be such that the adhesive is extruded at the joints of the blocks during assembly and the joint thickness is minimal. Adhesive that has become too thick cannot be used.



## CONSTRUCTION OF THE PROMONTA WALLS

Where there is a risk of rising damp it is advisable to provide polyethylene sheet beneath the wall.



### The first course:

If the base floor surface is too rough the area under the first course can be levelled using mortar, gypsum or a gypsum adhesive mixture.

The first course must be laid absolutely level to prevent subsequent vertical joints from opening. The blocks must be laid with the tongued edge at the top and the vertical faces fitted together after they have received the adhesive.



The blocks must be pushed firmly together so that the excess adhesive is forced out of the joints. The last block must be sawn to size so that it acts as a keystone. Prior to laying the second course the first course must be checked with a spirit level to ensure it is true and, if required, corrected.



**The second and subsequent courses:**

The first block must be laid to allow for proper bonding. Sawn surfaces must be free from dust.



The blocks must be laid in a tongued and grooved fashion so that the excess adhesive is extruded from the joints on both sides of the wall.

The special tongue and groove shape of the Promonta blocks allows the excess adhesive to be forced through the opening. After placing the second and subsequent courses the wall will be checked for flatness.



### The top course:

The blocks must be sawn to size so that the joint at the soffit is ca. 15 to 20 mm. The sawn edges should be free of dust.

To reduce wastage it is possible to place the blocks in the top course vertically and to utilize sawn off-cuts in the wall. Once the wall has been checked for plumb and flatness, he will be provisionally fixed at the ceiling.

The excess extruded adhesive is used to fill joints and any imperfections are troweled smooth.

To ensure the walls and floors are stable, the upper joint is best completed after the total loading of the floor. In this context reference is made to the technical information in document number 132 of the WTCB (BBR), dated September 1980.

In order to reduce as far as possible any cracks between the superstructure and the walls, it is advisable to do the plaster works after the walls have been built. If required the gypsum blocks can be fixed to the structure using metal anchors. This should be taken into consideration during the design of the building's functional requirements. It is also possible to use plastic U-profiles having a flexible joint face.

Where gypsum blocks have to be built between columns in concrete or brickwork, the walls must be built  $\pm$  10 mm outwards in order to make plastering of the columns in the same surface possible. Any walls to be built in other than the traditional manner for gypsum blocks, such as freestanding walls, long walls, walls without lateral support, expansion joints, abnormal heights etc., should be properly studied beforehand.

### Intersecting walls:

Intersecting walls such as cross-walls, corners, T-junctions etc., must be bonded every two courses with a minimum of two per story height.



### DOOR FRAMES

#### Normal timber frames:

The blocks of the first four courses must be laid either exactly to the size of the opening or a few centimeters further.

If the door openings do not continue completely to the soffit, the fifth course must be placed in such a way that the relevant blocks are supported at each end and they must have temporary supports during further building.

Once the adhesive has hardened the door openings are sawn to size. Small lintel heights must be properly catered for. Openings wider than 1,000 mm must be strengthened.

#### Door assembly sets (e.g. Polynorm types etc.):

Special attention is needed to saw the openings to size. It is strongly recommended that the lines of the openings to be executed be carried out after the correct levels have been established. Possible tolerances should be determined beforehand.

#### Metal doorframes:

These are usually placed first. Once they have been placed at right angles, checked for plumb, and are level and properly supported, they are anchored in the block wall.

If they are placed afterwards they can still be anchored by filling up the frame with mortar. Special attention should be given to the adhesion between the gypsum blocks and the mortar. Attention should also be given to supporting the opening.

## BUILDING IN PIPES AND TECHNICAL FACILITIES IN THE WALLS

Chasing and forming openings in the block walls must be carried out using the correct type of tools, such as chasing machines, drills etc.

Crowbars and other tools causing vibration are forbidden. In any case such chasing and drilling must not affect the structural integrity of the walling. The chases and holes must be filled to within ca. 2 mm of the wall surface with plaster or adhesive mortar.



## JUNCTIONS AT THE SOFFIT

Where the superstructure is not rigid the top joint can be filled with PU expanding foam, which is preferably applied once the final loading of the floor has been achieved.

The use of PU foam has a double function. The first one is acoustical, in order to avoid any direct contact with the structure. The other one is to ensure a supple joint between two different materials in order to prevent from any risk of cracking due to the sagging of the plate.

The joint should be free of dust.

Where the superstructure is not rigid we refer to the technical information in document number 132 of the WTCB, dated September 1980.

Cracks between the block walls and the superstructure can be visually reduced by the application of a glass fiber sealing strip.



## FINISHING THE CORNERS

Metal arris strips should be used to protect the corners. The corners can be slightly hacked away to form a sound base for applying the strips with plaster or adhesive. After it has hardened the corner can be finished properly to give a good surface.



## FINISHING OF SURFACES

After all chasing has been completed, the joints finished and any imperfections dealt with, the surfaces that are to be left exposed for painting can be given a finishing coat of Promolis.

This must be done on a dry and dust-free surface.

Surfaces to be tiled or to receive any other type of surface finish do not need to receive this coating.







### GUIDANCE FOR PAINTING OR WALLPAPERING

This should be done in accordance with the relevant manufacturer's instructions. Generally a primer coat should be applied prior to painting

