

**wolcraft®**

# Processing plasterboard explained step by step



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## Introduction

When renovating a building or room, the walls are initially covered with a layer of plaster. This is normally the job of a trained specialist. The disadvantage this has is that a large amount of moisture enters the place; therefore, taking a few weeks to dry out completely.



The subsequent insertion of solid partitions and attic extensions cause similar problems. Bricks must be placed and plastered. Moisture is also formed and this must be removed, before placing wallpaper or tiles.

In order to avoid the problem of excess water, drywall interior fitting is recommended (water is only added to the mixing material and the mix binder).

With this alternative to classic extension techniques, plasterboards are attached to wooden or metal sub-constructions, making it easy for the DIY enthusiasts.

## 1. Sub-construction

Drywall interior finishing with plasterboards requires, first of all, a wooden or metal sub-construction. This applies particularly to ceilings and walls, which are unsuitable for being directly bonded.

This facing shell forms an unrestricted vertical and horizontal support for the subsequent appli-

cation of plasterboards. In order to achieve this, the wooden ledges should be re-planed with an edger or the structure should be re-aligned with wedges. The spacing between the wooden battens with dimensions of approx. 24 x 48 mm or 38 x 58 mm will have to be adapted to the plasterboards used.

The mounting holes for the 8 mm frame anchors can be drilled with an all-purpose drill in one go directly through the wood into the brickwork. If a partitioning wall is to be installed, a post and beam structure made of metal sections will be used as sub-construction for fixing the plasterboards. In order to do so, the partition will first be marked on the wall, the ceiling as well as on the floor and then be aligned with string and level.

After having been cut to size with shears, if necessary, the frame sections (UW) can be bonded with a suitable weather seal so as to prevent acoustic transmission. The section will then be fixed with anchors to floor and ceiling. A power drill with hammer action, fitted with a 6 mm drill bit is required for the job. The right stand profiles (CW) can now be fitted into the frame sections, first into the bottom and then into the top. It is important that the profile engages into the frame by at least 1.5 cm.

The stand profiles will be aligned with an axis centre distance of 60 cm. (e.g. in the case of boards with a thickness of 12.5 mm) and crimped with the profile joint pliers, in order to secure a stable connection. This is especially important when only one installer carries out positioning.

Stand profiles on walls should be equipped with a weather seal and can be fastened with a dowel spacing of at least 1 m. In order to do so, boreholes can be drilled through the metal profile with a multi-purpose drill directly into the wall. Installation of electrical cables or even an additional insulation layer can be put into the hollow space between the ledges, squared timber or the metal profiles. Installations in ceilings and roof pitches require a similar work sequence.



# Cutting boards

## 2. Cutting Plasterboards

Room-high boards with a width of 125 cm are the best to choose from the large array of plasterboards on offer, since they enable larger areas to be quickly boarded. So-called “one-man boards” (e.g. with dimensions of

90 x 125 cm) are especially handy and advantageous, if transportation and storage problems exist. Especially impregnated boards should be used in damp rooms.



When cutting or adapting plasterboards of up to a thickness of 12.5 mm, you initially only require a sharp knife and a ruler.

Angle cuts are transferred with the integrated bevel and then cut to size.



The plasterboard is marked along the cutting aid with the knife and then carefully broken over a sharp edge. The backing board can then be cut through, if necessary.



Larger holes or cut-outs are marked and can then be cut out using a hand jigsaw. Pre-drilling is not necessary, due to the bevelled and partially ground point of the saw blade.



If numerous strips of the same size are required from the board, this is the ideal job for the strip and circle cutter. The required size is adjusted and the strip is marked using the cutter wheel before it is broken over a sharp edge as usual.



Round cut-outs are created in a similar way. Determine the radius, adjust and transfer with the integrated centring pencil and the cutter wheel or a pencil, before cutting out with the jigsaw.



Resulting cut or broken edges are subsequently smoothed with the edge planer. Straight cut edges are chamfered to around 2/3 of their density before the boards are fixed. Edges that have already been chamfered can be easily broken using abrasive paper.





## 3. Positioning – Clamping – Fixing



There are almost never enough hands when it comes to fixing the plasterboards; normally this is a job done by one person alone.

In order to ensure that the plasterboards on the wall have the necessary distance from the floor, they must be lifted slightly and held in the correct position. This requires little effort with the help of the board lifter and your foot.

The integrated moving hook on the lifter makes it easier to assemble the boards on the wall.



Telescopic ceiling supports and or clamps can temporarily hold the plasterboards in position, before they are finally fixed with suitable screws to the sub-construction. This can really facilitate your work.



It is possible to attach boards to ceilings and pitches without the assistance of anyone else. The boards are fixed using the plastic fixing holders, the supplied screws and a metal clamp. The holders are removed and can then be reused for other boards.



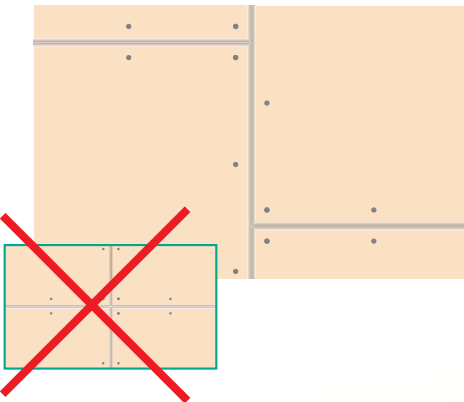
### 4. Fastening the plasterboards



The plasterboards are fastened to the wooden strip, squared timbers or a metal post-and-beam structure using special dry wall screws. These are available with a fine thread for frame sections and stud profiles and a coarse thread with different lengths, depending on the thickness of the plasterboards, for wooden ledges or squared timber. A cordless screwdriver with electronic speed control and a screw attachment with depth stop is the ideal tool for this job.



A special drywall interior fitting bit with pressed depth stop is used in order to correctly sink the screw and avoid damage to the board when screwing it into position. The most well-known screwdriver for this purpose is a size 2 Phillips bit. The screw sequence is important in order to prevent the boards from deforming; however, it can be stipulated differently depending on the manufacturer.



When screwing into position, no cross joints should be formed; however, the boards should have a corresponding offset.

Walls not requiring any special treatment are simply boarded (a board is simply screwed onto the sub-construction). If the wall is to bear a high load (e.g. the subsequent laying of tiles), double planning (two boards on top of each other) should be selected.

## 5. Plasterboards – Smoothing



Boards with half-rounded edges should only be sealed when they are screwed into their final position. The transitions are filled with the joint compound and slightly pulled off with the smoothing trowel. This is also the case with regards to screw holes and break-throughs, in addition to other uneven areas. Depending on the manufacturer, the overhanging joint cement is knocked off after it has thoroughly dried (approx. 45 – 50 minutes). With regards to two-layer boarding, this also has validity for the bottom board layer. A second finer coating of filler can be applied after drying, so as to achieve a better surface result.



With regards to two-layer planking, this also has validity for the bottom board layer. A second finer coating of filler can be applied after drying, so as to achieve a better surface result.

You can also work with joint cover strips when dealing with boards with flattened longitudinal edges. This requires three working cycles.

The outer corners of the plasterboards are provided with aluminium corner protection profiles. Transitions to other materials are sealed using a cartridge pistol and acrylic.



The joints of transitions between roof pitches and the valley rafter or jamb wall are reinforced with paper joint cover strips. The smoothing trowel should have a width of 10 – 15 cm.



## 6. Sanding Plasterboards



The joints of the plasterboards are sanded board by board so that all of the excess putty is removed. With the ergonomic manual sander and a strip of grid cloth, this can easily be carried out efficiently with only one hand. The sander can also be used with both hands in order to ensure a greater load transmission when removing coarse excess lengths.

The transitions are less visible and the final result is improved. It might therefore be necessary to repeat the sanding process a number of times. Mistakes arising from sanding can be remedied by applying a new coating of putty.



Due to the practical handle change system, the manual sander can be fitted with a special handle holder, enabling sanding work to be carried out on ceilings, using a telescopic handle and without the use of a ladder.



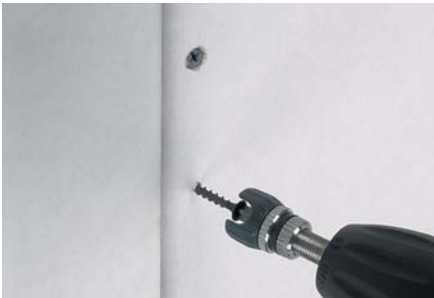
As this step is work intensive and somewhat tiresome due to the high dust load, the manual sander can be fitted with a dust vacuum plate, which can be operated on any household industrial vacuum cleaner by means of a 3 m long hose and adjustable adapter. The wearing of eye protection goggles is recommended when performing this type of installation.

## 7. Plasterboard Installation



When the plasterboards have been fastened and finished, it might be necessary to drill holes for installation articles.

In order to arrange electric switches and socket outlet combinations horizontally or vertically in the correct position, a template with distance marks and levels is helpful. The jigsaw can then be used to cut holes with the correct distance and in the correct position.



## The Products at a Glance

	Art.-No.	EAN code 4006885...	Article name	Dimensions (L x W x H in mm)	OU
	4029 000	...402904	Profile compound pliers	270 x 95 x 25	1
	4027 000	...402706	Ideal snip for straight slice	255 x 80 x 28	1
	4036 000	...403604	Multi-purpose drill CT for metal, wood, stone	Ø 6 x 100	3
	4037 000	...403703	Multi-purpose drill CT for metal, wood, stone	Ø 8 x 120	3
	4035 000	...403505	Plasterboard cutting tool	920 x 70 x 100	1
	4030 000	...403000	Strip and circle cutter for plasterboard	740 x 180 x 100	1
	4026 000	402607	Edge planer for plasterboard	265 x 58 x 100	1
	4032 000	...403208	Cutter with soft handle incl. retractable trapezoidal blade	155 x 35 x 25	3
	4033 000	...403307	Manual fret saw with soft handle	320 x 45 x 30	2
	4040 000	...404007	Fixing set	Clip 140 x 90 x 15 Cross 80 x 35 x 50	1
	4042 000	...404205	Telescopic support	1,60 m - 2,90 m	1
	4045 000	...404502	Board lifter with hook	215 x 75 x 15	3
	4055 000	...405509	Interior fitting bit holder	-	3
	4046 000	...404601	Scraper, 50 mm blade	-	3
	4051 000	...405103	Professional scraper, 50 mm blade	210 x 50 x 25	3
	4047 000	...404700	Professional extended scraper, 150 mm blade	257 x 150 x 30	1
	4048 000	...404809	Plaster mug	Width 125/50	3
	4049 000	...404908	Smoothing trowel	280 x 130 x 90	1
	4056 000	...405608	Hand-sander for plasterboards	220 x 105	1
	4057 000	...405707	Accessory set for hand-sander „dustfree“	220 x 105	3
	4020 000	...402003	Manual sanding set “dustfree”	220 x 105 x 95	1
	4012 000	...401204	Telescopic handle for hand-sander	1,13 m - 2,00 m	1
	4058 000	...405806	Telescopic handle with stick-holder	1,13 m - 2,00 m	1
	4010 000	...401006	2-component change grip handle	180 x 45 x 75	1
	8722 000	...872202	Rigips kit	-	1
	4050 000	...405004	Template for hollow wall boxes	185 x 50 x 15	3

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