

# INSTALLATION INSTRUCTIONS CEILING

WWW.MAESTRO-PANEL.BE

**1** Tools needed: Steel square, Spirit level, Handsaw and mitre box or electric mitre saw, Stapler, Drill, Hygrometer, Hammer, Tape measure and/or fold meter, Chalk line, Level lath.

**2** Install over the whole surface of the ceiling a wooden trellis to which the ceiling panels will be attached using the 'floating principle'. The trellis shall be fitted perpendicularly in relation to the panels' length. Only a trellis fitted in the way described below is allowed. Any other form shall relieve the manufacturer of any liability.

**3** First of all construct a perimeter around the space in question using planed wooden slats. Fix these slats against the walls using screws and plugs. For your trellis, it is advisable to use dry, planed and clean pine. This should prevent the slats' distortion and movement.

**4** Fix joists spaced at a maximum of 40cm. (16") apart (from center to center).

**5** In between these joists, fix beams at the most 1.5m. apart (60"). These beams placed in-between are an absolute necessity for a stable ceiling structure.

**6** Check whether the trellis is level using a level lath and/or a level laser. The way the ceiling trellis has been installed, gives it the strength of a closed and load-bearing grid, which can take the ceiling's weight and movement. If the width to be bridged is more than 4m. (160"), it is highly advisable to provide additional points of suspension along the ceiling in order to avoid the ceiling to sag.

**7** Attach battens to the trellis with a space of max. 30cm. (12") in between. This should create enough air circulation between the trellis and ceiling panels. Make sure that all jobs, like plastering, sanding, subflooring and flooring are finished to avoid the risk of having humidity in the room.

**8** Make sure that the room where the ceiling will be installed is sufficiently dry during installation. A relative humidity of max. 50% must be respected. This percentage equals the ideal humidity of a healthy and hygienic interior climate. The room in question must be dry, free of draught and must have doors and windows. Moreover, this room must have the ambient temperature of a place where people usually live in.

**9** Open up the packs with a knife and let them acclimatise for 48 hours in the room where they will be installed. Read very carefully the installation instructions and make sure everything is clear and understood. In order to be better prepared, consult the installation videoclips on the Maestro website.

**10** It is of the utmost importance to mix and match the different packs during installation in order to compensate for small colour differences between packs. You must definitely do this when installing a wood finish with "board-effect". All Maestro panels are manufactured using the latest technology and are tested in compliance with the highest quality control. Panels with a visible manufacturing defect must not be installed. Always make sure you're installing your products under bright lights. Before installing, check every panel in order to avoid not noticing any defects. Only panels with visible defects which have not been used can be subject of our guarantee provisions.

**11** Pay extra attention to whether the first row of panels is perfectly straight! This will avoid further problems during installation and is of course also very important in order to achieve a beautiful and perfect end-product. Use a chalk line to mark your first line. Be sure to leave at least 10mm. (just under half an inch) of space between wall and ceiling. This will allow for some movement by the ceiling. If this expansion joint is not included, it is very likely for the ceiling to come loose because normal movement of the (wooden) ceiling is being obstructed. The main component of all Maestro panels is wood and wood is a living product. This means that these panels can either shrink or expand. Such an expansion can be as much as 2mm. (a tenth of an inch) per meter. The bigger the surface, the bigger the expansion joint will need to be.

**12** Panels can be fitted as follows:

a. Staples: use staples of minimum 14mm (just over half an inch). Shoot the staples into the lip with a staple gun, held under an oblique angle.

Adjust the gun pressure so that the staple does not shoot through the MDF.

b. Mounting clips: Only original Maestro clips can be used because they have been specifically designed for these Maestro panels.

**13** Are never allowed: screws, glue. Even in combination with the allowed fitting

methods mentioned above, glue is not allowed!!

**14** There are three different ways to fit Maestro panels: no pattern bond, symmetric bond, staggered bond. When calculating the amount of materials needed, take into account a 5% loss when there is no pattern, up to 12% when there is a staggered bond! Provide rear battens for the end joints. They will provide perfect support and guarantee a perfectly finished end-product.

**15** When installing, always take into account that the end joints are always at least 25cm. (10") apart and overlapping.

**16** Install following rows by first pushing the tongue length-wise into the groove of the previous panel. Then push the front end closed. Fix the panel using clips or staples.

**17** Make sure you have an expansion gap of at least 10mm at all sides around the ceiling. When a width of more than 7 meters needs bridging, the ceiling must be interrupted with an extra expansion joint. When using humid resistant panels above a shower, make sure you have a ventilation hole between ceiling and shower wall of at least 40cm. (16") in order for the steam to escape freely because humid resistant panels are not designed for direct contact with water. Always ensure good ventilation/a good exhaust system.

**18** Finish off your ceiling with the appropriate Maestro coving. Take into account the following installation instructions.

!! Never glue coving to the ceiling!!

!! Affix by nailing to the wall. If need be, glue can be used against the wall.

## TIPS & TRICKS

**A** Install beforehand electric cables for light fixtures and/or built-in spotlights.

**B** In view of applying sufficient insulation, install rock wool in between the joists.

**C** When fitting built-in spotlights, always carefully read the manufacturer's installation instructions. Always take into account that the hole must be bigger than the fixture. Contact heat must be avoided. (built-in spotlights can get as hot as 110° C! (+/- 230 degrees F))

**D** Make sure your ladders are very stable. Take into account you are working at a height and ensure your stability and balance by using the correct ladder.

**E** When finishing off the walls (painting), use masking tape which does not leave any trace. Preferably remove all masking tape immediately after painting. Prepare an assembly plan beforehand. That way you will reduce waste and you optimise the use of panels. Before you start putting it all together, measure the ceiling and distribute your planks over the width of the ceiling. That way you will avoid having to finish off on too narrow a strip.

**F** Relative humidity during installation: max. 50%. Avoid plastering, screeding and any floor work AFTER you have installed your ceiling. This work shall cause a sudden increase in relative humidity in the room you are working in. These panels have been developed for interior installation only. Any other application shall render the guarantee conditions nil and void. Are excluded at all times: use in saunas, (open) shower rooms, swimming pools and any form of application outside. Humid resistant panels are however, not designed for direct contact with water. If the wall does have direct contact with water, use Maestro WATER-WALL panels.

**G** An alternative for the wooden trellis structure is a metal support structure. We refer to the manufacturer's installation manual in this case. All installation instructions of a "floating" ceiling, as described above, must also be complied with.

# INSTALLATION INSTRUCTIONS CEILING

WWW.MAESTRO-PANEL.BE

