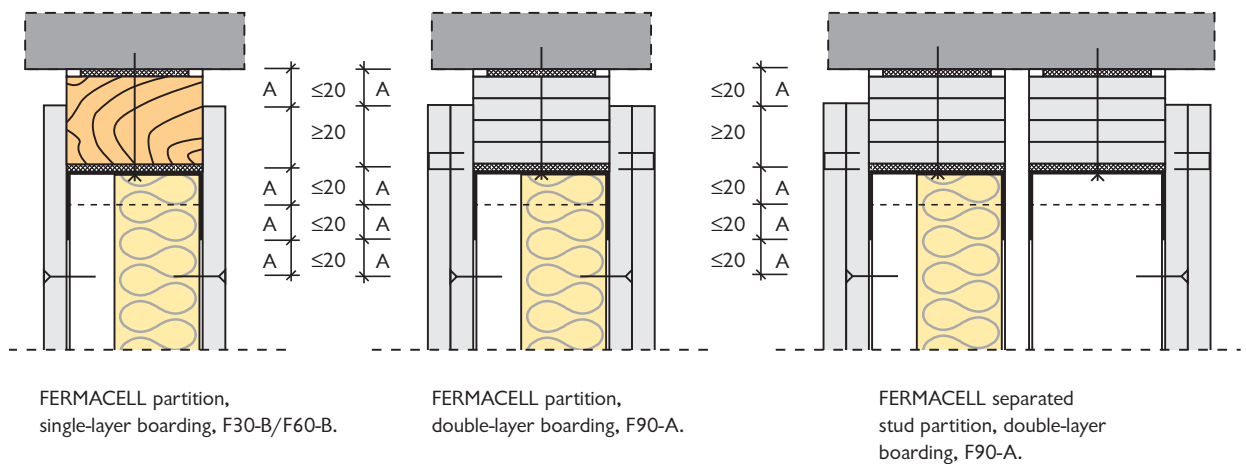


DATA SHEET

DEFLECTION HEAD DETAILS

Deflection head details are required where deflection in the main structure to which the head is to be fixed is expected to exceed 10mm after installation. Deflection head details must be constructed in such a way that no forces from the main structure are transmitted into the XPR partition details.

A = Degree of expansion in mm



As shown above the deflection head detail can be constructed using FERMACELL strips cut to exactly fit the width of the head profile or timber sections. The total thickness (depth) of the FERMACELL strips or timber section must correspond to the dimension of the ceiling deflection specified /expected, plus the overlap for the boarding.

DATA SHEET

For F30 partitions timber sections must be >50mm wide.
For F60 partitions the timber section must be >70mm wide.
For F90 partitions use FERMACELL strips.

Where using FERMACELL strips, these should be cut in to lengths the width of the head profile, glued to each other before assembly and then fixed with staples or screws and then fastened flush with the edge to the ceiling profiles. Using appropriate fixings these should then be fitted through the head profile and the FERMACELL strips into the ceiling at centres of ≤ 700 mm. Where the ceiling is uneven then a mineral wool isolation strip is recommended (melting point 1000°C for fire rated partitions) as well as a fire rated mastic to seal any gaps (as required).

With particularly high strip numbers, the fixing spacing should be reduced or the strips should be locked in place with an appropriate angle section. For fire rated partitions the fixing centres in to the main ceiling should be reduced to ≤ 500 mm.

Where timber sections are to be used the timber and header profile must be fixed to the ceiling at the same time with a single fixing at ≤ 700 mm centres (as with the FERMACELL strips). Insulation strips and flexible sealants can be used to fill any gaps with uneven ceilings. For filling gaps with uneven ceilings for **fire** and **acoustic** purposes the appropriate materials should be used.

The Stud profiles should be cut down in length to allow for the anticipated ceiling deflection. Care must be taken to ensure that with any movement the studs always sit to a minimum depth of 2.5mm within the header profile. For larger deflection movements a deep flange channel may be required. In all cases confirm the amount of movement with the specification.

The FERMACELL boards are to be cut short of the ceiling height by the required deflection amount. The edge of the board should overlap the FERMACELL strips or timber section by a minimum of 20mm. Boards must only be fixed to the vertical stud profiles, they must not be fixed to the header or footer track under any circumstance.

The first screw to be fitted into the stud below the head detail must be set down from the leg of the header profile by the required deflection amount. For wall heights above 5000mm, the deflection head detail must be mechanically stabilised with appropriate extra measures, such as support brackets.

For further details call our technical helpline.

The dimension details shown alongside these details apply to structures with fire resistance requirements according to DIN 4102 Part 4.