# Barrierboard Ceiling Systems C2

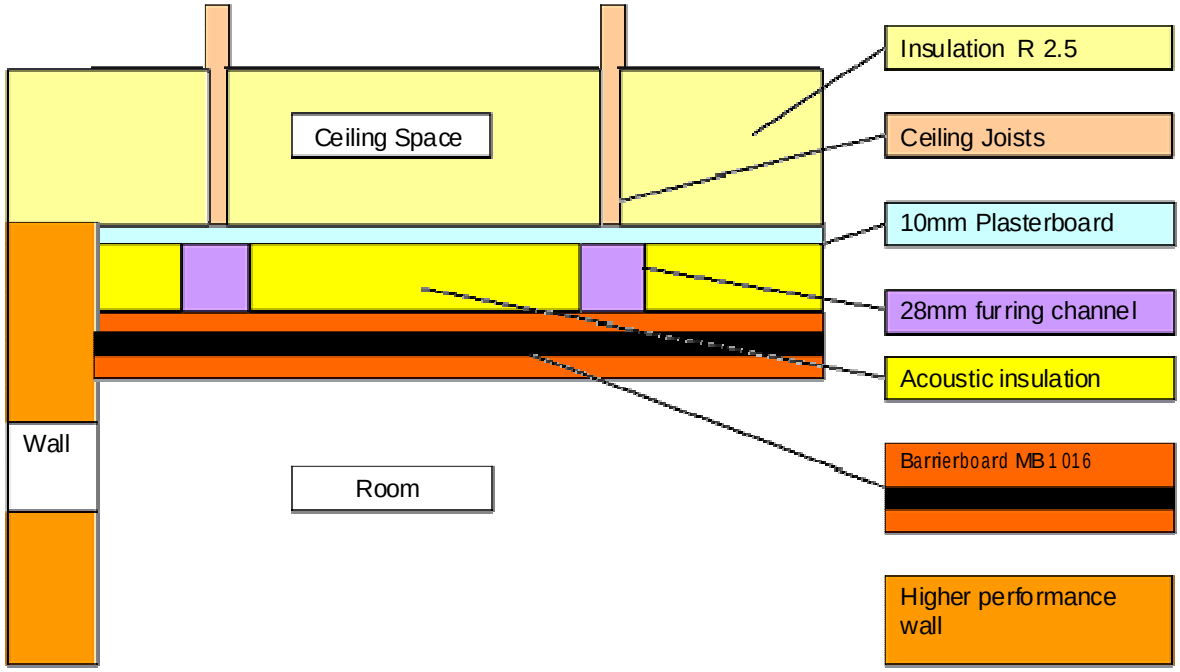
A Sound Reduction index Rw can be given for many individual materials and material combinations (as shown below) and in simple terms can be considered as an average amount of sound reduction that occurs to a sound when traveling through a material or combination separating one space from another.

If the wall performance is improved ( increase in Rw) over standard plasterboard walls whether new or existing then generally an improvement is required to the ceiling also.

For common 10mm plasterboard ceilings the Rw is 27

A significant improvement in Rw occurs when the configuration as shown below is used.

This Rw improvement can be from Rw 40 – 47 depending on the combination of plasterboard thicknesses and the separations used.




Typically the above system would produce an Rw of 40 and may suit walls with an Rw of approx 45 -48 *

* the total performance of the ceiling to match that of the wall depends on a number of factors including but not limited to, airspace above the ceiling, type of above ceiling insulation, lighting penetrations etc.
Specific assessments should be carried out to determine the type of the ceiling materials to be used and the spacing between the plasterboard and the Barrierboard to suit the acoustic reductions desired.

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