Open Plan Office Acoustics Overview

Open plan offices with workstations having screens that don't go all the way to the ceiling are common. They make good use of floor space and create a pleasant atmosphere due to their open and light nature.

Those same open plan offices also suffer from a lack of privacy and high noise levels. Their layout and composition generally means that people can hear other people's conversations and realise that other people can hear theirs.

Much work has been done towards developing an open office style that promotes teamwork but preserves privacy and keeps noise levels to a minimum. It has shown that in general, the factors that influence speech privacy fall into two groups:

Those that have a large effect on speech privacy and should be optimised.

 a) Absorption of the ceiling
 b) Screen height
 c) Workstation plan size

Those that have less effect but should still conform to a minimum value.

 a) Panel absorption
 b) Panel Transmission Loss
 c) Floor absorption
 d) Ceiling height
 e) Ceiling mounted lighting

Most problems with office acoustics occur after the office is occupied. People and phones get busy and the speech level goes up as everyone tries to be heard over the noise.

Only some of the parameters that affect privacy can be altered after construction. Of those, ceiling absorption is the most likely candidate for an improvement (if it hasn't already been taken care of). It has a high influence on privacy and can be retrofitted easily. Screen height may also be raised with the addition of panels to the top of the screen (may be transparent).

Office acoustics can designed with acoustic measurement and calculation. In most cases this cost may be less than "experimenting" with gut feel ideas or advice from sellers of acoustic panels. For offices with a speech privacy or noise problems, Ultrafonic provides professional acoustic design and if required can manufacture appropriate acoustic treatments for the construction of new offices and the retrofit of existing offices.