

Why, when I screen out the fields, does my phone still work?

A mobile phone is not a suitable means of detecting the strength of microwave radiation entering a room. A phone handset can work at tiny signal levels (0.00001 V/m), and can still display a number of signal strength bars even after a significant amount of remedial reduction work has been done. If there is a 1 volt per metre RF level in the room you are concerned to shield, then you would need to screen by 99.99% before the phone starts to lose bars, and 99.9995% to reduce the incoming signal strength sufficiently to stop the phone from ringing. In Salzburg (where they currently have the lowest public microwave exposure guidelines in the world) the maximum recommended level is 0.02 V/m inside buildings. At this level a mobile phone will show 'full signal strength'. We believe that 0.05 V/m is low enough not to cause adverse health effects in most people. If it does so, most of us will have problems in the medium or long-term, as most of us are subject to this sort of level of microwave exposure outside our houses, and indeed levels considerably higher than this are common in towns and cities. A few extremely sensitive people who suffer from Electrical Hypersensitivity (ES) can react to levels of 0.02 V/m and below.

If a mobile phone is placed in a microwave oven and the door is then shut, 2 out of 3 mobiles will still ring. A microwave oven is designed to stop high levels of radiation leaking out when it is working. For a microwave signal strong enough for a mobile phone to work to get in, it becomes clear how pervasive and intrusive microwave radiation is. It may give some indication of how difficult it is to screen them out altogether.