

Case Study

Private Residence in London



About Us

Mobile Signal Solutions are UK based installers of commercial signal boosting systems, focused on improving mobile phone signals indoors.

Our professional team are approved installers of carrier grade equipment compatible with all UK networks. We work with the client from site survey to installation and offer maintenance & support contracts. Working together we ensure 100% network coverage, no budget overruns, and we offer upfront payment or leasing options.

Our main aim is that clients are happy to recommend us to others. Each system is voice and 4G compatible but we also future proof the design to carry other new mobile frequencies as they are launched e.g. 5G and 6G compatible systems.

The Property

This spacious two-story home, including a large basement, has been meticulously finished to an exceptionally high specification. The top-notch refurbishment, while enhancing the quality, resulted in insulation that blocked all signals from entering indoors, rendering it impossible to make calls from any room.



The Challenge

The requirement for full coverage posed a restriction on any additional cables or visible antennas. However, to meet the expectations and needs, we utilized the existing Cat6 cables and loft space for locating cables and antennas out of sight while ensuring full coverage.

Why A System Was Required

Our solution entailed designing a digital system that utilised a high-powered amplifier to compensate for the limited number of antennas. This amplified signal was broadcasted further, surpassing what could be achieved with a smaller amplifier, despite using only a few antennas. While using higher-grade amplifiers increased the project budget, the result was a successful implementation, and the client attained full signal coverage without the need for any visible cables.



The Results

Our solution provided full coverage on all floors without adversely affecting the home's decor. By utilising larger amplifiers, we were able to overcome the weak input signal and successfully broadcast voice and data across both 4G and 5G networks.



What Causes Poor Coverage?

Distance from the local base station or the construction of the outer walls are the main factors. Outer stone walls blocking signal is a common problem in many older buildings, due to the thickness of the walls signal finds it difficult to permeate indoors, especially in basements and areas with no windows.

In modern buildings, the high level of energy insulation also causes signals to be blocked. Buildings using foil backed insulation on roofs and walls, alongside variants of window panes where the glass contains metal particles to reflect the sun's rays means walls, roofs and windows all block the mobile signal.

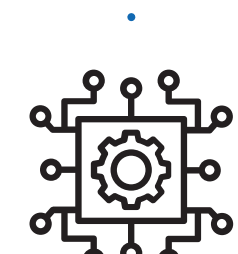
Need A Solution?

If you're looking to improve connection across your site but aren't sure where to start give us a call today. Our team are happy to talk through your options and set up a survey.



Step One: On-Site Survey

You will meet with our surveyor to discuss your needs in full. You can discuss areas of importance and agree on a design plan for the system you require.



Step Two: System Design

Our surveyor will then design the best possible system. The surveyor will then meet with the operations team to put a cost together for that system.



Step Three: Installation

Before you know it we will have a team of highly skilled engineers on-site and your system will be up and running and providing flawless mobile signal throughout.

"The MSS team were very proactive and professional at all times through the project. There was a large manufacturing site with limited to no signal across two floors and they managed to install and complete the work within 5 days safely and with excellent results! I would recommend using this company for any project big or small."

Adam Fielding
UK Manufacturing IT Lead,
Baxter Healthcare Ltd

