

ArcAirTech & 13/03/2025 - 16/03/2025

The aim of the pilot scheme was to determine the efficacy of ArcAirTech's fixed unit in combating mould spores. The testing was carried out over 1 voided property with the **750+ Wall Mount**.





Mould Spore Air Sampling Reports

Client:

Property Location:

Testing Methods: Air Sampling

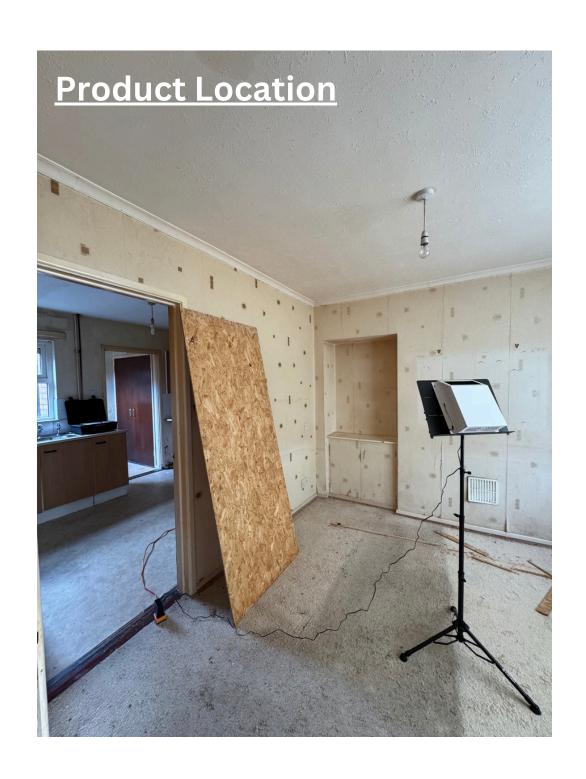
Testing Company: Apacor & Sporecyte

Product: 750+ Wall Mount

Duration: 72 Hours



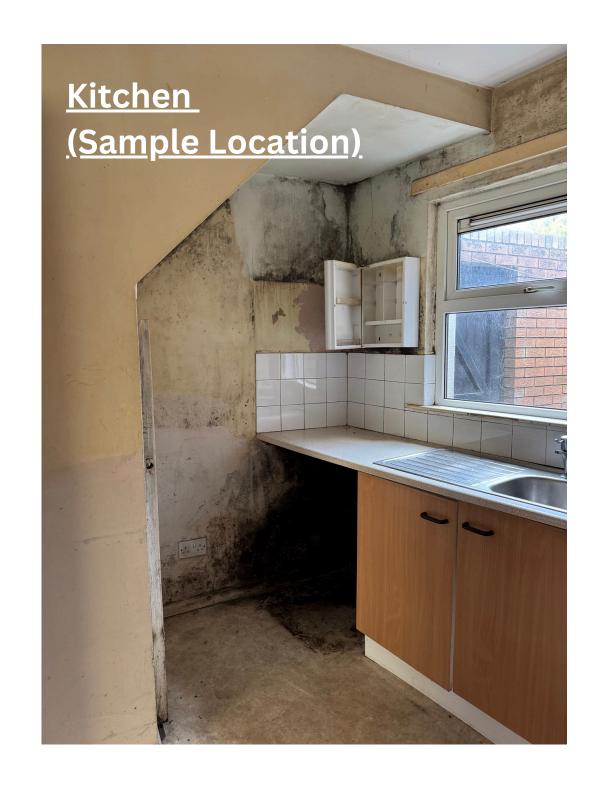
- 2 bed semi-detached house.
- Testing Images







- 2 bed semi-detached house.
- Property Images







- Indoor Moulds (Water Related)

Testing Period 72 Hours

Predominantly Indoor - Water Related

Fungal Classifications	Spores Found per m³		Reductions
	13/03/2025 - Indoor 1	16/03/2025 - Indoor 2	Percentage Decrease
Asp/Pen String	2587	533	79.397%
Chaetomium	320	13	95.938%
Clado-Sphaerospermum	0	0	
Fusarium	0	0	
Gliomastix	0	0	
Scopulariopsis	0	0	
Stachybotrys	0	0	
Trichoderma	0	0	
Ulocladium	0	0	
Wallemia	0	0	

- Indoor / Outdoor Moulds

Testing Period 72 Hours

Indoor / Outdoor			
Fungal Classifications	Spores Found per m³		Reductions
	13/03/2025 - Indoor 1	16/03/2025 - Indoor 2	Percentage Decrease
Alternaria-like	0	0	N/A
Aspergillus / Penicillium	66653	18800	71.794%
Cladosporium	16213	307	98.107%



Conclusion

Following the completion of our 72-hour trial, we believe that we have successfully demonstrated the efficacy of our hydroxyl technology in combating and eliminating mould spores in real-world, high-contamination environments. The data clearly shows a significant reduction in mould spore concentrations, including that of Stachybotrys which was reduced by up to 95.9%.

This result highlights not only the technology's ability to neutralise existing mould spores but also its potential to suppress the continuous regeneration of new spores in heavily contaminated homes.

In environments with severe mould contamination, spore regeneration is a persistent and ongoing process. Mould colonies can release millions of spores per day, especially in damp, poorly ventilated areas. These spores remain airborne for extended periods, recontaminating surfaces and posing continuous health risks. Without effective intervention, mould spores can regenerate to dangerous levels within hours of remediation efforts, making traditional cleaning methods insufficient for long-term control.



Conclusion

Our hydroxyl technology has demonstrated its ability to:

- Eliminate Airborne Spores: By generating reactive hydroxyl radicals, the system neutralises mould spores at the molecular level, breaking down their cell walls and rendering them inactive.
- Penetrate Hidden Reservoirs: Unlike traditional methods, hydroxyls can reach areas that are difficult to clean manually, such as within wall cavities, behind furniture, and inside HVAC systems.
- Prevent Spore Recolonisation: The continuous operation of the technology helps to maintain low spore counts, reducing the likelihood of mould colonies regenerating and spreading.
- Suppress Future Spore Production: By lowering the overall mould load in the environment, the system indirectly reduces the reproductive capacity of surviving colonies, slowing down the cycle of spore regeneration.

Based on the trial results, we confidently conclude that our technology has effectively demonstrated its capability to not only eliminate existing mould spores but also keep future spore proliferation at bay. This represents a shift from traditional mould remediation, offering long-term protection in environments where mould contamination has historically been difficult to control.

Our technology provides an innovative, science-backed solution to one of the most persistent indoor air quality challenges, making living environments safer, healthier, and more resilient against future mould outbreaks.