

## Image: Wall of Hertz test chamber

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Credit: ESA–G. Porter, CC BY-SA 3.0 IGO

These spiky carbon-impregnated foam pyramids, seen here in ESA's Hertz test chamber, cover the walls of facilities that simulate the endless void of space.

This 'anechoic' foam absorbs radio signals, enabling radio-frequency

testing without any distorting reflections from the chamber walls. In addition, it also absorbs sound – making these chambers eerily quiet places to work.

ESA's Hertz chamber, in its technical centre in the Netherlands, is an isolated metal-walled chamber offering versatile ways of measuring a subject's radio-frequency performance. Its walls block all external electromagnetic energy such as TV broadcasts and mobile phone signals for uninterrupted testing.

Other ESA radio-frequency testing facilities – including the smaller Compact Antenna Test Range and the Maxwell [chamber](#) for assessing the [electromagnetic compatibility](#) of satellite systems – are similarly clad with foam.

Provided by European Space Agency

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