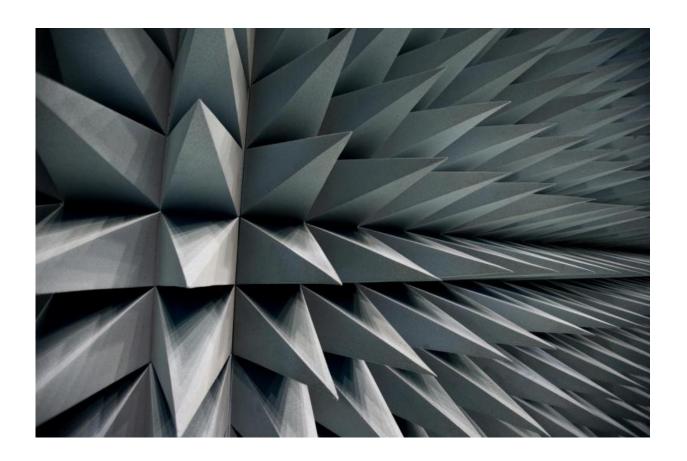


## Image: Anechoic foam covering to simulate the endless void of space

March 31 2016



Credit: ESA/Guus Schoonewille

These spiky foam wedges, seen here in ESA's Maxwell 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.

The Maxwell <u>test</u> chamber – part of ESA's <u>ESTEC</u> test centre in Noordwijk, the Netherlands – performs electromagnetic compatibility testing, ensuring all systems aboard a satellite can operate together without harmful interference.

Maxwell's metal walls form a 'Faraday cage', screening out all external electromagnetic energy such as TV broadcasts and mobile phone signals.

ESTEC's dedicated <u>antenna test facilities</u> – comprising the Hertz <u>chamber</u> for full satellites and the smaller Compact Antenna Test Range for antennas – are similarly fitted with metal <u>walls</u> and lined with anechoic foam.

## Provided by European Space Agency

Citation: Image: Anechoic foam covering to simulate the endless void of space (2016, March 31) retrieved 24 April 2024 from

https://phys.org/news/2016-03-image-anechoic-foam-simulate-endless.html

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