

Have you ever had the fear that we are under the threat of an EMP attack that will knock out all electronics - spiralling the world into apocalyptic chaos? Well, thanks to the work of University of Nebraska engineers Christopher Tuan and Lim Nguyen, such worries of our electronic world ceasing existence can now be hushed. That is because these engineers have successfully created a cost-effective concrete mix that will shield our electronics from intense pulses of electromagnetic energy!



Image source: <http://freedomprepper.com/category/disaster-planning/emp-blast/>

This EMP-proof concrete is an adaptation of Tuan and Nguyen's slightly more pedestrian concrete break-through - their self-warming concrete. This innovation has the ability to melt ice and snow safely with the use of a safe, low-level electrical current. It was as they were working on the concrete for safer roads and bridges that they came to the realization that their new concrete also has the ability to block electromagnetic currents!

How is this possible, you ask? Well, this microwave-blocking property is made possible from an essential ingredient in the concrete mix called magnetite. This ingredient is an iron core with magnetic properties that allows the concrete to essentially soak up radiation.

The University has also solidified a licensing agreement with American Business Continuity Group which has allowed them to develop a commercially available, spray-on "shotcrete" where the material is easily used to retrofit older buildings and vulnerable infrastructures.

Source:

<https://www.engadget.com/2016/11/16/spray-on-conductive-concrete-anti-emp-attacks/>