

AutonomiCity

The product—Self-healing concrete

As civil engineers we know there is a fundamental problem in our construction structures, that they all crack, no matter how carefully being stored or reinforced. It's important for the government and owners for social houses, dam, bridges and tunnels, as we have been spending 40 billion pounds per year in UK to maintain and replace those damaged structures. Our solution is to build up a self-healing system in concrete, in the same way that our human body works.

Our smart system will be able to monitor the infrastructures and repair the damage remotely when they need. This technique will also provide a longer lifespan for the concrete for more than 50 years, and required zero labour maintenance. On the other side, since we are using recycled plastic to build up self-healing system, we are more eco-friendly, and will be able to bridge recycled plastics to a wider market.



Normal concrete



Self-healing concrete