

15-2016-4317 | Strong, Environmentally-friendly Construction Materials made from Compressed Salt (NaCl)
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Background

Cement & Gypsum require a lot of energy for production, consume large areas of land and are hard to recycle. There is a global need for new environment-friendly, low cost materials for construction.

Our Innovation

Utilizing millions of tons of Halite that accumulate as a byproduct of industrial processes, for example, at "Dead Sea Works", a producer of Potash products which generate a 20 Millions tons of Halite each year as a by-product.

Importantly, the salt is formulated to stabilize against water & humidity, compressed to form very strong blocks and boards.

The Building blocks & boards are produced by compression of formulated Halite (NaCl), used to build interior walls, providing beneficial properties. Compatible with other building materials (gypsum, cement and more). Low energy & cost of production, utilizing huge industrial waste streams, fully recyclable at end of life.



Advantages

- Stable blocks produced, **5+ fold stronger than cement!**
- Can be easily stacked like LEGO blocks
- Production of boards by roll-pressing demonstrated
- Can be further modified for specific requirements

Opportunity

POC Achieved, the project is looking for industrial partnerships for scale up

Patent Status

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