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In this article, we explain how to we can make concrete from waste. However, we use this concrete in the building..
We make concrete from a combination of cement, water and ground rock or sand. However, this concrete has two major problems, firstly, that it is very expensive and secondly, that is harms the environment. So we have to try to produce less waste and also get our waste back into the cycle. We have built a successful concrete sample of tile scraps. Which we carefully examined in the concrete laboratory. We make concrete, from wastes . Because it is very beneficial. We explain this concrete in the following text.

By : Mohammadreza Beizaee , Cademix institute of Technology

Description

The natural perspectives included within the generation and utilize of cement, concrete and other building materials are of developing significance. Cement produces so2. It is expensive to erect unused cement plants. Substitution of squander materials will preserve decreasing assets, and will maintain a strategic distance from the natural and biological harms caused by quarrying and exploitation of the crude materials for making cement. Fractional substitution by common materials that require small or no handling, such as pozzolans, calcined clays, etc., spares vitality and diminishes emissi.

What is concrete?

Concrete is an building fabric that mimics the properties of shake and could be a combination of particles closely bound together. It is essentially a mix of totals, regularly normal sand and rock or smashed shake. Portland Cement and enacted by water to make a thick semi homogenous mass. Because of its common characteristics concrete is in some cases alluded to as counterfeit shake. Concrete is very solid in standing up to compression. In utilize where ductile stresses have to be be suited support is incorporated into the concrete to assimilate pressure. It is the foremost broadly utilized development fabric. It permits adaptability in basic shape because it can be formed into a assortment of shapes.

The most important constituents of concrete are aggregates and cement. You may think that aggregate is not important and is found everywhere, but this idea is wrong. In some countries aggregates are very rare. We have a shortage of aggregates in the Netherlands and we have to import aggregates to make concrete, and this is very expensive. So what should we do?

Do we have an alternative to aggregates?

Other than finding substitutes for cement, replacing aggregate materials with recyclable and reusable resources is an effective strategy used to minimize greenhouse emissions caused by traditional concrete. What alternative do we have for fine aggregate and coarse aggregate ? What is the function of water?
Some material for replacement of stone:

1. Glass
2. Wood pieces
3. Destructed concrete structure
4. Destructed bitumen road
5. Metals etc.
   We tested the crushed tiles and fortunately the results were very good.

Crushed tiles replace aggregates
Tile properties:

High Strength. Stain Free. Scratch Resistance. Light Weight. Easy Washing. Bacteria Free. Insulation. Because ceramic and tiles are baked at a temperature of about 1150 degrees. Ceramic becomes very stable at this temperature and its properties are close to stone. After that Ceramic is a stable and strong body, so it has good resistance against compressive and shear forces. As a result we use from ceramic and tiles in making concrete.

Concrete mixing formula

We make the concrete mixing plan very diverse. for instance, we mix it in proportions of 1, 2 and 4. So we mixed **1 part of cement is mixed with 2 part of sand and 4 part of coarse aggregate**. We made a concrete sample in which we halved the amount of aggregate and added ceramic tiles instead. It is must withstand a strength of more than 20 MPa, If so, however we can use it in the structure.

Results

It is sample that we made withstood more than 20 MPa. However we did a lot of experiments under different conditions. We performed these experiments in a well-equipped university laboratory. So we can replace the crushed pieces of ceramic and tile with aggregate. To use both factory waste and less stone mines. We hope that humans will produce less waste so that our environment will be less damaged.

About the author

Mohammad Reza Beizaee is a civil engineer at the Cademix Institute of Technology (Austria). He has a bachelor's degree in civil engineering. Beizaee engineer has multidisciplinary skills in project management, supervising it, steel, wood and machine workshops. So he uses several engineering software such as : AutoCAD, Revit Solid and Photoshop in her projects.
And he has been a designer and executor of industrial projects and reconstruction of old buildings for more than 8 years. He is designer Air Duct . Researcher fellow crawl space . As a result also he has worked in large companies and the strength, beauty and timing , However of the project are very important to him.
He specializes in various types of it and performs concrete execution and repair.

He has also written the following several articles:
-1- Repair a Concrete Floor
-2- Interior Designer And Professional Executer

-3- Septic Tanks – Repair and Maintenance
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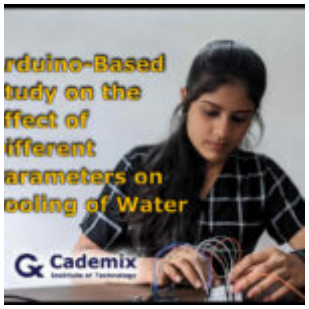

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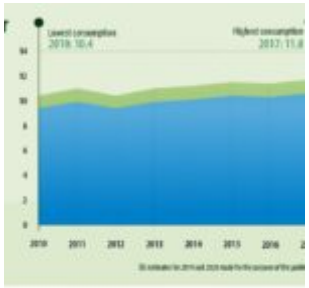

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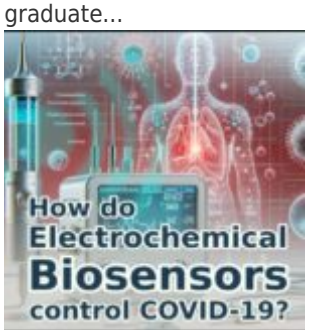

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