

To: Leila D Behjat Healthy Materials Lab

15.02.2021

## Letter

Dear Ms. Behjat,

As the CEO of the company, I am writing this letter in order to inform you about the product, IP of which belongs to our company LLC Hempire USA (Hempire). The product is the binder called "Fifth Element" (binder) that has been developed by Hempire specifically for hempcrete type of materials. It is a lime-based binder when mixed with hemp hurds and water produces a hempcrete insulation material, that can be applied by following methods: In-situ casting, spraying, fabrication of prefab panels, bricks or blocks.

## The binder consists of:

- 1) 85% Hydrated Lime (Amount of Calcium Oxide min 80%)
- 2) 15% Natural minerals

The binder consists out of only natural ingredients and excludes the use of cement, hydraulic lime or any toxic or artificial (non-natural) components in its formulation. One of the main advantages of Fifth Element binder is the creation of very light hemperete with the low dry density of around 260 kg/m3 (16.2 lb/ ft3) with improved thermal properties. Also, the use of our binder inside a hemperete mix allows the worker on construction site to take the formwork off immediately after the compaction of hemperete, so there is no technological delay.

Our binder has been used to erect or insulate numerous hempcrete houses across the world including Europe and USA and has won international awards during green tech competitions. I really hope that you include our natural sustainable local product (now produced in USA) in your material list. Let me know, if you have any questions.

Best Regards,

Sergiy Kovalenkov CEO of Hempire USA