

Mr. L. E. Calkins

March 8, 1943

Messrs. Duke - Lloyd - Dittenhoefer

CALSIITE

I am enclosing herewith my file copy of U. S. Patent No. 2,311,583, issued February 16, 1943, to Paul S. Lemming, Joliet, Ill. (assigned to F. E. Schandler & Co. Inc.) which I assume you will wish to refer to Mr. Duke.

This patent is closely along the lines of our Calsilite proposition, with the exception that it contains a substantial proportion of ex-foliated vermiculite, the exact proportions of which are as follows:

|                               |               |
|-------------------------------|---------------|
| Exfoliated vermiculite flakes | 65.4%         |
| Diatomaceous earth            | 15.7%         |
| Hydrated lime                 | 12.8%         |
| Long fiber asbestos           | 6.1%          |
|                               | <u>100.0%</u> |

The mixture is claimed to have a low K factor (i.e. .64 at 500° F. and .83 at 1200° F.) and is capable of withstanding high temperatures.

The ingredients are mixed together and cast in a mold.

Among other things it is stated that "the formation of calcium silicate can also be increased by heating the slabs under pressure, e.g., 150 lbs. steam pressure....."

This patent will warrant careful consideration, not only in connection with our pilot plant operations but also from the standpoint of our pending Calsilite application.

I would appreciate your returning the enclosed patent to me after it has served your purpose.

President

HL:G.  
Encl.

01-0213925

GAF 22749

Mr. L. E. Galkins

March 24, 1943

Messrs. Duke - Lloyd - Dittmer

CALCILITE

Following my letter of March 8, I am now enclosing herewith my file copy of U. S. Patent No. 1,812,306 of June 30, 1931, to Arthur J. Russ, which I assume you will similarly wish to refer to Mr. Duke.

The composition as covered in this patent has the following formula:

|                                                                                        | <u>Per cent by weight</u> |
|----------------------------------------------------------------------------------------|---------------------------|
| Diatomaceous earth.....                                                                | 27.5                      |
| Jefferisite.....                                                                       | 40.6                      |
| Hydrated lime.....                                                                     | 27.5                      |
| An asbestos which will withstand high temperature, such as<br>African brown fibre..... | 4.4                       |

You will observe on page 2 it is stated:

"The block may be made up in the ordinary way by mixing the materials with water, running the mud into molds and subjecting the blocks thus formed to steam induration."

In essence the patent is quite similar to U. S. Patent No. 2,311,538, referred to in my prior letter, and is also somewhat analogous to our Calcilite composition.

I would appreciate your returning the enclosed patent to me after it has served your purpose.

President

RA:G.

01-0213926

GAF 22750