

Flax-li-num Insulating Company

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Manufacturers of FLAX-LI-NUM

Flax-li-num is a thermal insulation and sound control material used for many years in various industries to meet existing insulation requirements. FLAX-LI-NUM is a semi-rigid board felted from the long tough fibres of the flax plant, consequently FLAX-LI-NUM is durable and assures the user that the insulation will last as long as the building stands.



Flax-li-num is vermin and rodent proof. It is guaranteed by the manufacturers never to fall down or become displaced in a building wall. As the material is of *semi-rigid* type it cannot warp, break or crack. FLAX-LI-NUM should not be considered as a substitute for ordinary wood or metal lath, sheathing or other parts of a building construction.

The FLAX-LI-NUM insulation method has been developed for roofs and walls of



frame, brick, hollow tile or veneer constructions, and to give the user the full benefit of its heat insulation and sound proofing qualities.

Flax-li-num was introduced in 1909, first, to insulate railroad refrigerator cars, and has extended its application to a variety of insulating services in residences and industrial buildings and in many specialty markets, such as iceless shipping containers and kindred products.

The use of FLAX-LI-NUM in buildings, brings definite economies in fuel and radiation required, as well as the production and maintenance of healthful conditions. Heat transmission coefficients are given for various types of walls and roofs.

To get the best service from FLAX-LI-NUM, specify the exact place where insulation is to go. The effectiveness of insulation is increased if applied between studdings, midway between the sheathing and lath and plaster for frame construction, or furred out on masonry construction. FLAX-LI-NUM for walls should be at least $\frac{1}{2}$ in. thick and for roofs 1 in. thick.

The FLAX-LI-NUM method of application of insulating material to all types of construction is fully covered in our booklet, "Heat Insulation for Houses"—A. I. A. File 37-b-1. There is also contained in this booklet the FLAX-LI-NUM radiation chart which greatly simplifies the accurate computation of radiation where heat loss factors are known. A copy of this publication should be in the files of every engineer and architect, and will be sent on request.

Heat Loss factors for various insulated and uninsulated walls of stucco, brick and frame construction are fully covered in the publication "Heat Insulation for Houses."

These walls are listed below with their *K* values, showing how these values are substantially reduced by the addition of FLAX-LI-NUM in accordance with our standard specification which calls for $\frac{1}{2}$ in. FLAX-LI-NUM in side walls and 1 in. ceilings or roofs.

Stucco Walls

- A-1. Standard frame construction furred out over sheathing, metal lath and stucco. Lath and plaster inside..... .242
- B-1. Same as above but with $\frac{1}{2}$ in. Flax-li-num added..... .146
- C-1. Standard frame construction with Byrnett sheathing. Stucco directly on sheathing. Lath and plaster inside..... .287
- D-1. Same as above with $\frac{1}{2}$ in. Flax-li-num added..... .161
- E-1. Frame construction. Metal lath directly on studs. Stuccoed outside and back-plastered. Lath and plaster inside..... .357
- F-1. Same as above with $\frac{1}{2}$ in. Flax-li-num added..... .181

Brick and Tile Walls

- A-2. Standard frame construction. Lath and plaster inside. Face brick veneer..... .210
- B-2. Same as above with $\frac{1}{2}$ in. Flax-li-num added..... .133
- C-2. 8 in. hollow tile. 4 in. Face Brick, plastered directly on tile..... .255
- D-2. Same as above, but furred inside with 1 by 2 in., plastered on Flax-li-num Keyboard..... .141
- E-2. Standard 13 in. solid brick wall, furred inside, lath and plaster..... .191
- F-2. Same as above with Flax-li-num Keyboard as plaster base..... .146

Frame Walls

- A-3. Standard frame construction. Sheathing, paper and siding outside. Lath and plaster inside..... .255
- B-3. Same as above with $\frac{1}{2}$ in. Flax-li-num added..... .151
- C-3. Standard frame construction, same as A-3, except plastered on lumber substitute..... .216
- D-3. Same as above with $\frac{1}{2}$ in. Flax-li-num added..... .136
- E-3. Standard frame construction, same as A-3, except lumber substitute used for sheathing..... .229
- F-3. Same as above with $\frac{1}{2}$ in. Flax-li-num added..... .141

Roofs and Ceilings

- A. Standard frame construction. Wood shingles, attic floor. Lath and plaster..... .179
- B. Same as above, with 1 in. Flax-li-num under ceiling joist furred down for lath and plaster..... .104
- C. Standard frame construction, same as A, without attic floor..... .284
- D. Same as B, without attic floor..... .132
- E. Standard frame construction, attic floor, tile roof..... .163
- F. Same as E, with 1 in. Flax-li-num under ceiling joist furred down for lath and plaster..... .098

One of the fields in which FLAX-LI-NUM finds extensive use is in the insulation of industrial roofs, where it serves to reduce heat losses, secures greater comfort for workers and corrects condensation difficulties which hamper production in many instances. It is also extensively used for sound control and acoustical correction.

All details pertaining to the above uses are covered in the aforementioned publication, "Heat Insulation for Houses."