Pennrich & Company, Inc.

29 Broadway, **New York**

TORFOLEUM

MAILLIARD & SCHMIEDELL

LOS ANGELES SAN FRANCISCO PORTLAND SEATTLE VANCOUVER

Torfoleum is made of dried Sphagnum Moss and its record of performance under actual working conditions, over a period of years, has demonstrated conclusively that it is a highly efficient insulating sheet. Its nature and advantages make it of practical use in meeting a wide range of insulating and sound deadening needs.

Torfoleum has an exceptionally low thermal conductivity as confirmed by the test of J. C. Peebles of the Armour Institute of Technology:

Sample	Thickness In.	Density Lbs. Cu. Ft.	Mean Temp. Deg. Fahr.	Heat Conductivity, per 1 in. Thick	B.t.u. per Hour per Actual Thick.
1	1.62	10.7	70	0.253	0.156
2	1.61	11.4	70	0.266	0.165

Torfoleum has been rigidly tested for its resistance to compression and the compression in 1 in. under a load of 1,764 lb. per square foot in only 0.03 in.

Torfoleum does not rot. It contains no bituminous or mineral binder and therefore provides permanent insulation against heat and sound transmission.

Torfoleum is impregnated against water absorption which is a guaranty of the permanence of its insulating qualities.

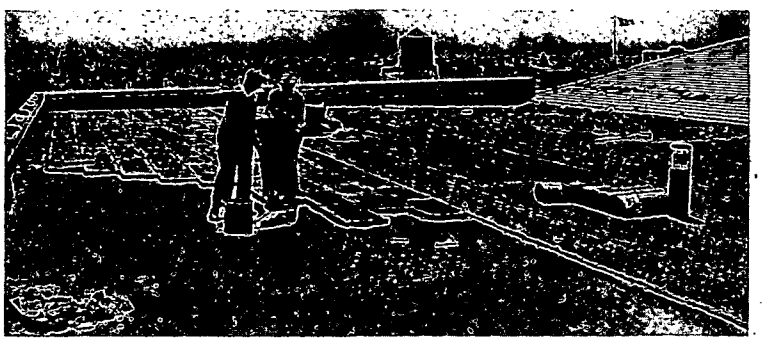
Torfoleum is free from harmful odor and particularly adaptable for use in storage plants where foodstuffs are to be stored.

Torfoleum is a sterile material.

Torfoleum is a fire retardant, as it has been thoroughly impregnated against rapid ignition and it may be used as a heat insulator up to 230 deg. fahr.

Torfoleum can be nailed and it can be cut with a knife or saw. Its application is very simple and can be done by anyone familiar with this type of work.

Torfoleum is made in sheets 12 by 32 in. or 19½ by 39 in., in thicknesses of 1, 1½, 2, 3, 4 and 6 in.; it is packed in cartons containing about 64 board feet and weighing approximately 70 lb.



Applying 1½ in. Torfoleum to the Concrete Roof Slab of Addition to L. Bamberger & Co., Department Store, Newark, N. J., Jarvis Hunt, Chicago, Ill., Architect

Sprayo-Flake Company

Administrative Offices
Milwaukee

Manufacturers of Sprayo-Flake Material and Equipment

56 South Bay Street
Wisconsin

Licensed Operators in Principal Building Centers

INSULATION SPRAYED ON WITH GUNS

Process—SPRAYO-FLAKE insulating process consists of forcing by air prepared flakes of fibrous material previously impregnated with fire resisting agent through a specially constructed gun. As the flakes leave the gun they are coated with sprays of atomized adhesive agent (water glass) or (asphalt) and projected to the surface to be insulated. The coated fibrous flakes form a blanket of insulation covering all cracks and crevices. It can be applied to practically any surface in any desired thickness.

Development—SPRAYO-FLAKE was conceived by a layman while observing the installation of insulating material in his own home under course of construction. Prompted by a desire to overcome the inefficiency and attendant difficulties involved in installing prepared types of insulating materials, the spray-gun method was evolved. Further development proved the soundness of this theory. SPRAYO-FLAKE method in one operation does a most thorough job; it eliminates entirely the labor of cutting, fitting, and nailing.

Further development of the original idea dates back to the year of 1924 when specially designed equipment was perfected to apply SPRAYO-FLAKE. The next step was adoption of an adhesive agent, addition of fire resisting qualities, and vermin proofing which was perfected in laboratories and practical usage in the building field.

Distribution and Service—To assure the highest return per dollar invested in insulation the SPRAYO-FLAKE Co. has adopted a modern, economically sound plan of merchandising and distribution. SPRAYO-FLAKE is supplied direct from factory to job through licensed operators. These licensed operators located in principle building centers are insulation specialists, financially responsible, and work on an exclusive franchise basis. Each installation is made by expertly trained mechanics under exacting supervision.

This advanced plan of distribution enables the architect, builder, or owner to know the exact cost of insulation. SPRAYO-FLAKE is always quoted on the basis of unit price per square foot or lump sum bid installed, including labor and material.

Physical Characteristics

The fibrous cellular structure and method of application gives SPRAYO-FLAKE the desired characteristics of the ideal insulation material:

1. **LOW THERMAL CONDUCTIVITY.** 0.25 B.t.u. per hour per square foot per 1 in. thickness per degree temperature differential.
2. **PRACTICABILITY.** Can be applied to practically any surface in any desired thickness. Seals cracks and crevices, calks around window and door frames.
3. **FIRE RESISTANT.** Pre-chemically treated fibrous material plus the sodium silicate binder produces a highly effective fire resisting insulation.
4. **VERMIN PROOF.** Alkali silicate binder and alkaline sulphate asphalt impregnation render SPRAYO-FLAKE insulation repellant to vermin.
5. **LIGHT WEIGHT.** Flakey fibrous air cell structure weighs only 4.6 lb. per cubic foot installed.
6. **PERMANENCY.** The fabricated blanket of SPRAYO-FLAKE insulation is held in place securely by employing a sodium silicate and asphalt cohesive binder. This binder also preserves the fibrous flakes from deterioration. The cohesive and long-life properties of sodium silicate and asphalt have been recognized for years.
7. **LOW COST.** SPRAYO-FLAKE insulation is manufactured and applied mechanically in one operation eliminating costly labor involved in cutting and fitting prepared types of materials.
8. **FLEXIBILITY.** SPRAYO-FLAKE is sufficiently flexible to allow for usual expansion and contraction of structural members to which it is applied without impairing its efficiency.
9. **SOUND ABSORBENT.** The cellular structure and resiliency of SPRAYO-FLAKE render it a highly sound absorbent material.

NOTE.—Conductivity and Transmission tests by such authorities as Prof. J. C. Peebles, Armour Institute Bureau of Standards and Prof. F. B. Rowley of Minneapolis.

Complete Technical Data and Specifications Furnished upon Request