CATALOG NO. 102



J-M BUILDING MATERIALS

ASBESTOS

MAGNESIA

H. W. JOHNS-MANVILLE CO.

Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/1

J-M
BUILDING
MATERIALS



CATALOGUE NO. 102

H. W. JOHNS-MANVILLE CO.

72 JEFFERSON AVE., DETROIT, MICH.

Baltimore	Dallas	Milwaukee	Pittsburg
Boston	Detroit	Minneapolis	San Francisco
Buffalo	Kansas City	New Orleans	Seattle
Chicago	London	New York	St. Louis
Cleveland	Los Angeles	Philadelphia	

8520

Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/2

Copyright, 1909, by
H. W. Johns-Manville Co.

SECTION 1

KEYSTONE HAIR INSULATOR

THE IDEAL INSULATION AND SOUND DEADENER
FOR WALLS AND FLOORS

Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/3

ADVANTAGES OF "KEYSTONE"

Keeps buildings warm in winter, cool in summer and comfortable at all times.

Quickly saves its cost in coal bills.

Makes the attic habitable and the top flat comfortable at all seasons.

Unequalled as a non-conductor of sound between walls and floors of adjacent rooms and apartments.

Prevents condensation under tin and iron roofs, thus prolonging the life of the roof.

One layer of Keystone is equal in insulating and sound deadening efficiency to many layers of ordinary sheathing paper.

Absolutely inodorous and vermin proof.

Flexible and fits odd corners—easily applied.

Permanently durable—lasts as long as the building.

An efficient insulation for refrigerating and cold storage plants.

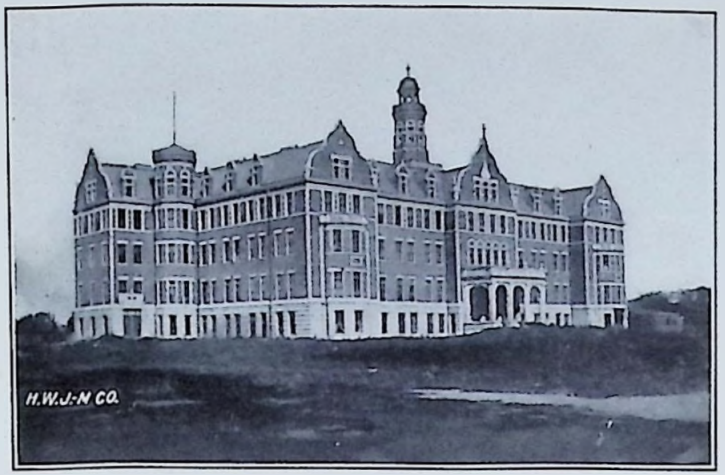
Phoenix and Salamander Brands are effective flame barriers, preventing the spreading of flames from one room or floor to another.

Adds greatly to the comfort and but little to the cost of a building.

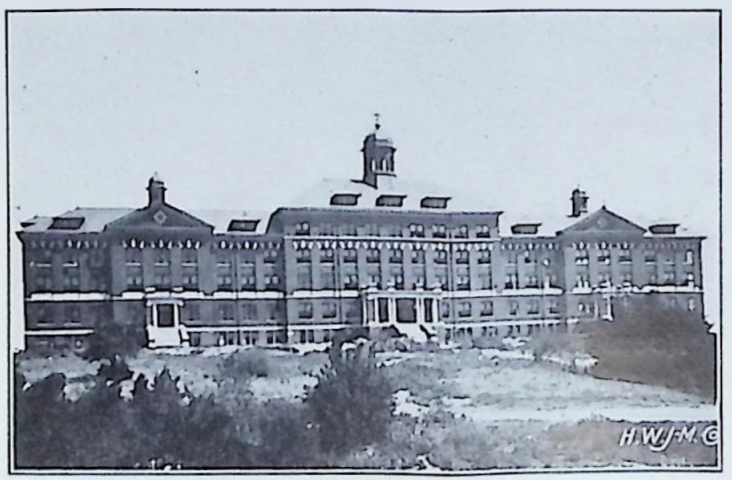
Unexcelled for Carpet Lining.

Is an excellent insulator for sun houses, poultry buildings, incubators, ice chests, etc.

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909) Published by AsbestosClaims.Law
ACL Doc 21283 · Page 4 of 54 asbestosclaims.law/library/21283/4



ST. MARY'S ACADEMY, MONROE, MICH. Deadened with *Keystone Hair Insulator*. Harry J. Rill, Architect, Detroit, Mich.



HOLY TRINITY COLLEGE, DALLAS, TEXAS. Floors in this building deadened with 51,000 square feet of *Keystone Hair Insulator*. H. A. Overbeck, Architect.

THE IMPORTANCE OF INSULATION



Perfect weatherproofing of dwellings is essential from the standpoint of both comfort and economy. While architects, contractors and home builders have for a long time appreciated this necessity, no adequate construction was obtainable at a reasonable price. With the advent of KEYSTONE HAIR INSULATOR it was found that at a slightly increased cost, buildings could be constructed so that the temperature within would be maintained at a satisfactory degree even under the most extreme weather conditions.

KEYSTONE is Nature's own protector from heat and cold. Its loose, fibrous construction, combining the maximum number of small, dead-air cells, loosely quilted between layers of fire and water-resisting papers, prevents the transmission of heat or cold from the exterior.

As a sound deadener, KEYSTONE HAIR INSULATOR is unequaled. Placed between walls and floors it effectually deadens the sound from adjoining rooms.

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 5 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/5

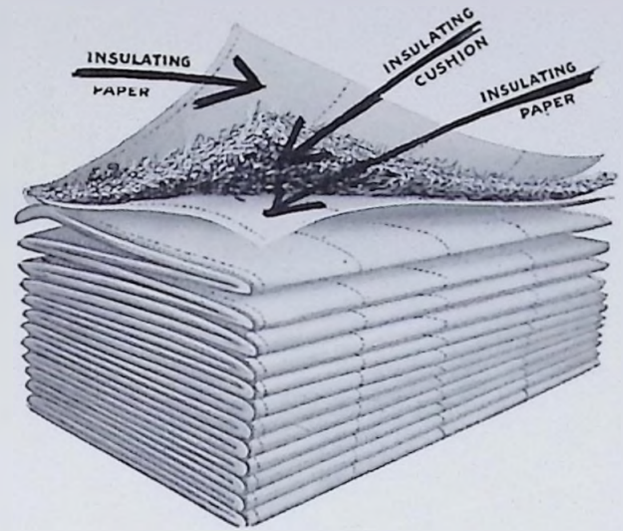


CONGREGATION OF NOTRE DAME ST. LOUIS ACADEMY, PULLMAN, ILL. Insulated with *Keystone Hair Insulator.* J. W. Fertin, Architect, Chicago.



COUNTRY RESIDENCE OF HON. SETH LOW, BEDFORD STATION, N. Y. Floors deadened with *Peerless Brand* and side walls above first story and portions of roof Insulated with *Neptune Brand of Keystone Hair Insulator.* Grosvenor Atterbury, Architect, New York.

WHAT KEYSTONE HAIR INSULATOR IS



Its construction

KEYSTONE HAIR INSULATOR consists of chemically cleansed cattle hair, securely fastened between two layers of strong, non-porous building paper. The hair, the cushion-like character of which lessens contraction and increases the storage of dead air, gives maximum insulating value.

The hair is chemically treated, leaving a coating of lime which renders it absolutely vermin-proof and odorless. Will not rot like vegetable fibre; will not attract moisture; will not pack down nor settle; will not dry out and split; and will not carry flame as fire instantly shrivels it.

One layer of KEYSTONE—which can be applied at a single operation—will give far better results than several layers of the best sheathing paper. KEYSTONE quickly pays for itself in fuel saved and renders a substantial dividend in economy and satisfaction at a very small additional outlay to the total cost of construction.

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 6 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/6



ALL BUILDINGS DESIGNED AND BUILT BY JOHN R. CORBIN CO., Brooklyn, N. Y., Insulated against Heat and Cold with *Keystone Hair Insulator.*

JOHN R. CORBIN COMPANY
Manufacturers of Houses

Manufacturing Department

BOROUGH OF BROOKLYN
NEW YORK CITY, April 5, 1909.

H. W. JOHNS-MANVILLE CO.,
100 William St., New York City.

Gentlemen—In looking over our records we find that we have used your "Acme" Keystone Insulating paper on more than six hundred houses, and are pleased to state that it does in every way all that you claim for it.

To convince ourselves that a hair insulated sheathing paper was more effective in keeping out the cold than the ordinary sheathing paper, we experimented with two houses of the same model under similar weather conditions, one sheathed with "Acme" and the other with the ordinary paper and found that the house sheathed with the latter required ten per cent. (10%) more radiation to heat the house to the same degree as the house on which the hair insulated paper was used.

In fact, so convinced are we that a hair insulated paper is the only class of sheathing paper for frame dwellings, that we have classed "Acme" paper with the standard materials used in the construction of our houses.

Very truly yours,
JOHN R. CORBIN COMPANY,
H. G. Gooding,
Purchasing Agent.

HHG/CP.

APPROXIMATE COST

The cost of sheathing an ordinary eight-room dwelling with KEYSTONE is usually less than $30.00.

KEYSTONE FOR HEAT AND COLD INSULATION



ITS ADVANTAGES OVER BUILDING OR SHEATHING PAPERS

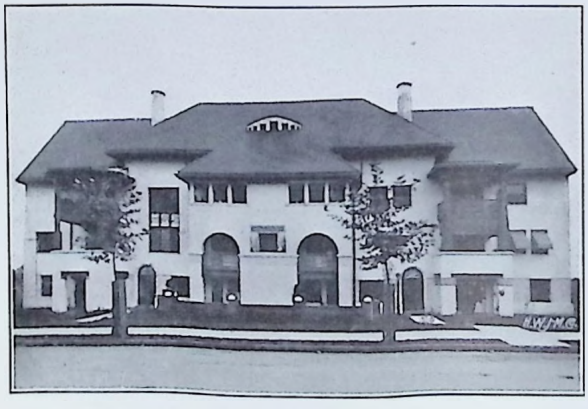
The perfect insulation obtained by the combination of the hair and paper cannot be obtained with ordinary sheathing papers, which, being dense and containing no confined air, are as cold (or hot) on one side as on the other, and impart their temperature to the next layer of solid material—and so on through the entire wall or floor. The construction of KEYSTONE is such that extreme resiliency is secured and the conduction of either heat or sound is prevented.

These results are not obtainable by the use of ordinary dense papers.

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 7 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/7



BENJAMIN APARTMENT BUILDING, MILWAUKEE, WIS. Floors in this building made Sound Proof with *Keystone Hair Insulator.*



OLD HEIDELBERG APARTMENTS, EAST END, PITTSBURG, PA. Floors deadened with 36,000 square feet of *Keystone Hair Insulator.* F. S. Scheibler, Jr., Architect, Wilkensburg, Pa.

METHOD OF APPLYING KEYSTONE HAIR INSULATOR TO SIDE WALLS OF FRAME STRUCTURES

WALL INSULATION

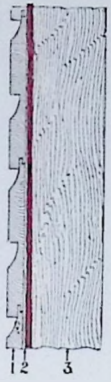


Fig. 1.
No. 1.—Siding.
No. 2.—Keystone.
No. 3.—Studding.

Figure 1. This shows the application of KEYSTONE directly to the outside of the wood frame or studs with Novelty siding or clap boards fastened directly through the KEYSTONE to the stud. This method gives excellent satisfaction and will reduce the cost of the walls of frame buildings to a minimum, doing away entirely with the outside boarding. Has proved a very efficient method for inexpensive structures in parts of the country where extreme changes in temperature are not encountered, as well as for summer cottages, bungalows, etc.

Figure 2. This cut shows the application of KEYSTONE HAIR INSULATOR fastened directly to the outside boarding with the clap boards over the KEYSTONE. This is the construction used generally in frame buildings.

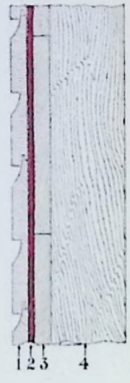


Fig. 2.
No. 1.—Siding.
No. 2.—Keystone.
No. 3.—Rough Boarding.
No. 4.—Studding.

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 8 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/8

METHOD OF APPLYING KEYSTONE HAIR INSULATOR TO SIDE WALLS OF FRAME STRUCTURES

Figure 3. Shows the application of KEYSTONE on the inside of the studs in addition to the layer between the outside boarding and clap boards. This construction increases the insulating value to a wonderful extent. We particularly recommend this construction for work in northern climates where severe temperature is prevalent.

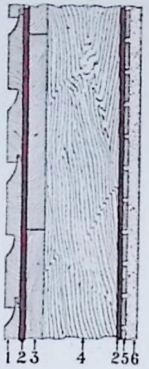


Fig. 3.
No. 1.—Siding.
No. 2.—Keystone.
No. 3.—Rough Boarding.
No. 4.—Studding.
No. 5.—Lath.
No. 6.—Plaster.

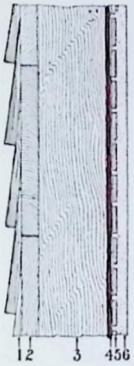


Fig. 4.
No. 1—Clapboards.
No. 2—Rough Boarding.
No. 3.—Studding.
No. 4.—Keystone.
No. 5.—Lath.
No. 6.—Plaster.

Figure 4. Shows the application of KEYSTONE HAIR INSULATOR to the inside of the studding—nailed in place before the lath and plaster are applied. This is a very desirable application for this material as the KEYSTONE is not compressed to any extent, thus obtaining the full insulating value of this remarkable product.

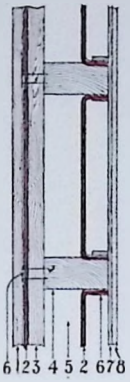


Fig. 5.
No. 1.—Clapboards.
No. 2.—Keystone.
No. 3.—Rough Boarding.
No. 4.—Studding.
No. 5.—Air space between Studs.
No. 6.—Lath securing Keystone.
No. 7.—Lath.
No. 8.—Plaster Efficient.

WALL DEADENING

Figure 5. Shows the application of KEYSTONE HAIR INSULATOR between the clapboards and rough boarding and between the studs on outside walls of frame buildings. This is recommended where severe weather conditions are prevalent. This construction is very efficient and inexpensive.

METHOD OF APPLYING KEYSTONE TO INTERIOR PARTITIONS

WALL DEADENING

Figure 6. Shows a very simple and effective method of applying KEYSTONE HAIR INSULATOR to interior partitions in frame buildings, where it is desirable to prevent the conduction of sound waves. This same method may be used in outside wall construction to good advantage.



Fig. 6.
No. 1.—Plaster.
No. 2.—Lath.
No. 3.—Studding.
No. 4.—Keystone.

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 9 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/9

Figure 7. Shows the application of KEYSTONE to both sides of the stud partition for interior construction where the greatest efficiency of the sound deadening material is required. The application of KEYSTONE in this manner is particularly recommended for partitions in apartments, concert halls, schools, hospitals, hotels, etc.



Fig. 7.
No. 1.—Plaster.
No. 2.—Lath.
No. 3.—Furring Strip.
No. 4.—Keystone.
No. 5.—Studding.

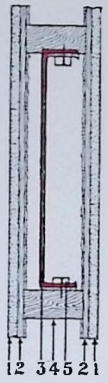


Fig. 8.
No. 1.—Plaster.
No. 2.—Lath.
No. 3.—Keystone.
No. 4.—Studding.
No. 5.—Lath.

Figure 8. Shows the application of KEYSTONE to interior partitions and is identical with Figure 9, showing the application of this material between floors. This method has been adopted by many of the largest contractors in the West and in all cases the results are very gratifying. By examining the cut carefully, it will be noted that this material is cut in strips long enough to reach from the floor to the eaves of an ordinary structure and fastened in place by the use of wood lath and nails. KEYSTONE being furnished in three-foot wide strips, can be applied in this manner without any waste to outside studding that is 16 inches on centers, allowing 1 inch on both sides for laps.

FLOOR DEADENING

Figure 9. Shows the application of KEYSTONE HAIR INSULATOR fastened directly to the floor joists at a point halfway between the floor and ceiling of the room below. This method is very efficient and the full thickness of the KEYSTONE insulating felt is obtainable, inasmuch as there is no compression except at the ends where it is fastened to the joists.

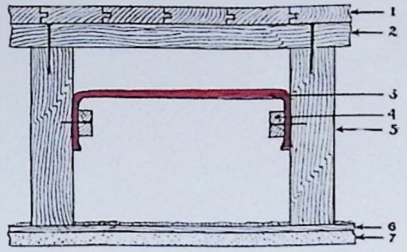


Fig. 9.
No. 1.—Finished Flooring.
No. 2.—Rough Flooring.
No. 3.—Keystone.
No. 4.—Lath.
No. 5.—Floor Joists.
No. 6.—Lath.
No. 7.—Plaster.

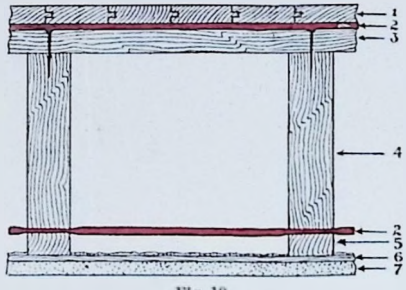


Fig. 10.
No. 1.—Finished Flooring.
No. 2.—Keystone.
No. 3.—Rough Flooring.
No. 4.—Floor Joists.
No. 5.—Furring.
No. 6.—Lath.
No. 7.—Plaster.

Figure 10. Shows KEYSTONE applied to the under side of the floor joist in addition to the layer between rough and finished floor. The furring strip, the full width of the joist and about 1 inch in thickness, is nailed on to keep the KEYSTONE in place. The application of KEYSTONE in this manner affords a construction that for sound-proof qualities is unequaled by any other construction or material, and we recommend it in apartments, schools, music halls, hospitals, hotels, etc.

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 10 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/10



APPLETON HIGH SCHOOL, APPLETON, WIS. Floors deadened with *Keystone Hair Insulator.* Herman Wildhagen, Architect.



SHARPSBURG PUBLIC SCHOOL, SHARPSBURG, PA. Floors deadened with *Keystone Hair Insulator.* S. A. Hall, Architect, Pittsburg.

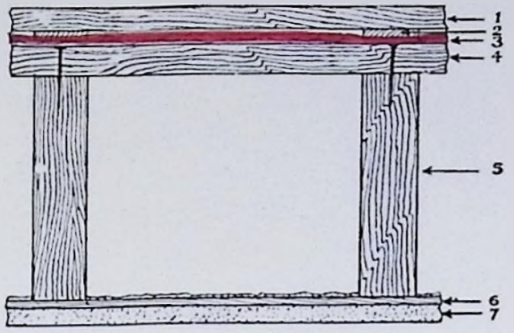


Fig 11.

No. 1.—Finished Flooring.
No. 2.—Furring Strips.
No. 3.—Keystone.
No. 4.—Rough Flooring.
No. 5.—Floor Joists.
No. 6.—Lath.
No. 7.—Plaster.

Figure 11. Shows the application of KEYSTONE in very much the same manner as Figure 10, except that before the finished floor is laid in place, there are small strips about the size of wood lath laid on top of the felt and running parallel with the floor joist, after which the finished floor is put in place, nailing directly through the small furring strips. By placing these strips in this manner the full efficiency and thickness of the KEYSTONE FELT is obtainable; there being an entire lack of compression of the felt at all points except at the points of fastening. These two constructions, as outlined above, are very simple, and excellent sound deadening results are obtainable.

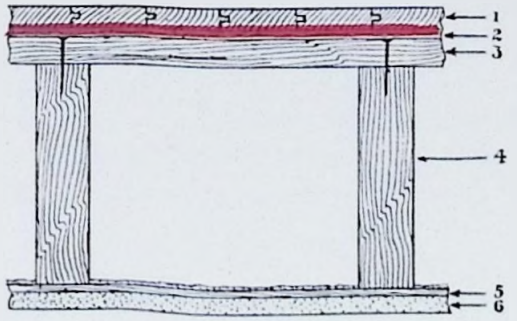


Fig. 12.

No. 1.—Finished Flooring.
No. 2.—Keystone.
No. 3.—Rough Flooring.
No. 4.—Floor Joists.
No. 5.—Lath.
No. 6.—Plaster.

Figure 12. Shows KEYSTONE applied between the rough boarding or flooring, with the finished floor laid over the insulating felt. This method is a very simple one. The Peerless Brand, with the Wool

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 11 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/11

Felt Paper laid uppermost, is the best to use in this construction as there is no possibility of the insulating material crimping or creeping.

J-M KEYSTONE TAPE

KEYSTONE TAPE consists of an elastic strip of Hair Felt, 1-4 inch thick by 2 inches wide, to one side of which is attached a strip of strong paper, slightly narrower than the hair felt. The use of KEYSTONE TAPE for caulking door and window frames gives surprisingly satisfactory results and effectually excludes dust, heat and cold, and prevents the interior wall finish from becoming soiled.

Put up in paper boxes containing 50 lineal feet each, 36 boxes in a crate. Price per box, $1.00.

FOR HEAT AND COLD INSULATING PURPOSES, WE RECOMMEND:—

Acme Brand: This is adapted for all forms of general insulation and weather-proofing; has plain Rosin-sized Building Paper on both sides.

Neptune Brand: Waterproof paper on one side and plain Rosin-sized Paper on the other; for use where protection against dampness is desired.

Double Neptune Brand: Waterproof paper on both sides for weather-proofing against excessive dampness.

FOR SOUND DEADENING, WE RECOMMEND:—

Acme Brand: This is adapted for sound deadening; has plain Rosin-sized Building Paper on both sides.

Extra Acme Brand: This is the same as *Acme*, except that it is double thick.

Peerless Brand: With J-M Wool Felt Paper on one side and plain Rosin-sized Paper on the other. Particularly adapted for sound deadening.

Phoenix Brand: Fire-and damp-proof Asbestos paper one side, plain rosin-sized paper the other.

Salamander Brand: Fire-and damp-proof Asbestos on both sides for fire protection, in addition to insulation of heat and cold and sound deadening.

LIST OF BRANDS

Packed in bales (folded, not rolled) three feet wide and containing 500 square feet each. Can be furnished also 18 inches wide where required.

Brand Paper	Bale Weight Pounds	Meas. of Bale Inches	Price Per Bale
ACME Plain Paper both sides.....	60	18x18x36	$6.75
EXTRA ACME Same as Acme, only double thick for extreme conditions.	72	18x20x36	8.25
PEERLESS Felt Paper one side, Plain Paper other side.....	80	18x20x36	8.50
NEPTUNE Waterproof Paper one side, Plain Paper other side...	70	18x18x36	8.50
DOUBLE NEPTUNE Waterproof Paper both sides.....	75	18x19x36	10.00
PHOENIX Fire- and Damp-Proof Asbestos Paper one side, Plain Paper other side.....	100	18x20x36	11.25
SALAMANDER Fire- and Damp-Proof Asbestos Paper both sides	130	18x24x36	14.00
ARCTIC Heavy Waterproof Paper both sides.....	MADE TO ORDER ONLY. Prices and Particulars on request.		

Liberal Discounts for Large Quantities.

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 12 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/12

SECTION 2

J-M ASBESTOS ROOFING

THE "CHEAPEST-PER-YEAR" ROOFING



J-M REGAL ROOFING

"THE ROOFING WITH LIFE"

Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/13

16 REASONS WHY

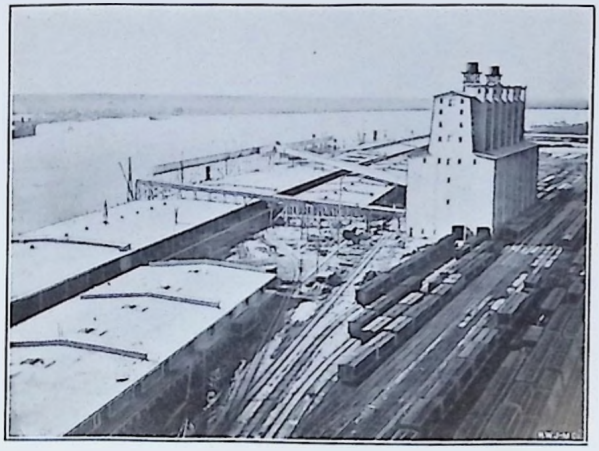
J-M ASBESTOS IS THE ROOFING YOU SHOULD BUY

1. It is the "cheapest-per-year" roofing.
2. It requires no coating or painting.
3. It is the only permanently durable prepared roofing.
4. It offers the best kind of fire protection.
5. It is cheaper than shingles, tin or sheet iron roofings.
6. It is absolutely water-tight in all kinds of weather.
7. It keeps the building warm in winter, cool in summer, comfortable always.
8. It gives a neat and attractive appearance without painting.
9. It cannot rust like metal roofings.
10. It will not melt or crack like tar roofings.
11. It has no gravel to wash off and clog outlets.
12. It is the only roofing that does not depend on coating for weather protection.
13. It can be applied by anyone. No special tools required.
14. It comes all ready to lay—nails and cement included.
15. It is adapted to all climates and weather conditions.
16. It is now in use on the largest factory plants, institutions, farm buildings, etc., throughout the United States.

H. W. Johns-Manville Co.: Building Materials, Catalo... Published by AsbestosClaims.Law
ACL Doc 21283 · Page 14 of 54 asbestosclaims.law/library/21283/14



PUBLIC SERVICE BUILDING, THE MILWAUKEE ELECTRIC RAILWAY AND LIGHT CO., MILWAUKEE, WIS. Covered with *J-M Asbestos Roofing.*



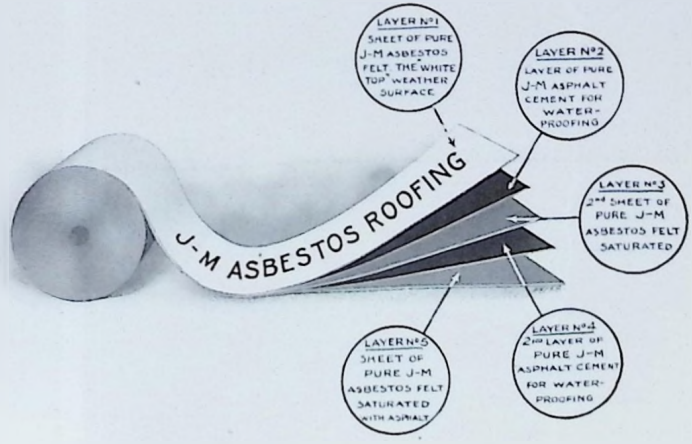
STUYVESANT DOCKS, ILLINOIS CENTRAL R. R. TERMINAL, NEW ORLEANS. 1,000,000 square feet of *J-M Asbestos Roofing* applied on concrete surface.

THE SELECTION OF A ROOFING MATERIAL

should be made with the utmost care, as in no other material about a building is *quality* and *durability* more essential. No other material is subjected to such *actual wear and tear*. Remember, in buying roofing you are buying "service"—either good, bad or indifferent. J-M Asbestos Roofing gives *real service*, because it is made of an *indestructible material*, and the cost of maintenance is practically nothing. Expense stops after this Roofing is once applied. Not so with other roofings, which must be continually coated or painted every year or two.

EVERY LAYER A ROOFING IN ITSELF

Examine the Built-Up Construction of J-M Asbestos Roofing. This Diagram Tells the Story



H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 15 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/15

WHY IT IS THE "CHEAPEST-PER-YEAR" ROOFING

J-M Asbestos Roofing requires no coating or painting—no repairs—hence all expense of maintenance is avoided. *The first cost is the only cost.* Other prepared roofings, tin and sheet iron roofs, require continual coating or painting every year or two, which, at the end of ten years, *triples the cost of roofing.*

CHEAPER THAN SHINGLES OR METAL ROOFINGS

The first cost of J-M Asbestos Roofing is less than that of tin, iron, shingles, slate, gravel or slag roofings. In addition to this the renewal expense of these roofings materially increases the ultimate cost to the user.

THE BEST KIND OF FIRE PROTECTION

Fire-proof construction is better protection to a building than any amount of fire insurance. By covering your buildings with J-M Asbestos Roofing and siding them with Asbestoside, you can secure the best possible protection from fire, and *at no extra cost.* These materials have the highest fire-resisting properties, because made of a fire-proof, indestructible mineral. No other roofing on the market offers such protection, as other ready roofings are made of wool felt, rag stock, paper, shoddy, coal tar, and other highly inflammable materials, which are an actual menace to a building, instead of a protection.

This fire-resisting feature is especially desirable for farm buildings, which are usually beyond the reach of fire protection. On account of the inflammable construction of these buildings (and because they are often built close together) when a fire gains headway in one

building, it usually means that all the buildings are doomed to destruction. If a building is properly roofed with J-M Asbestos Roofing and sided with Asbestoside, all the buildings around it might burn down without it being injured.

EACH LAYER OF J-M ASBESTOS IS A ROOFING IN ITSELF

If you could separate the layers of J-M Asbestos Roofing, you would see that it is built up of sheets of *pure asbestos fibre.* These layers are individually waterproofed and cemented together at our factories with J-M Asphalt Compound.

Each layer of the saturated Asbestos felt is a complete roof in itself as far as waterproofing is concerned, and without any disturbing influences would last indefinitely—additional plies being provided to take care of strains and wear. With this explanation it is obvious that a 4-ply roofing, all of which plies have watershedding properties, together with three coatings of asphalt, cementing them together into one homogeneous mass, necessarily means a roofing material in which the life is almost unlimited.

A PERMANENTLY DURABLE, READY ROOFING

J-M Asbestos Roofing is *permanently durable,* because it is a mineral product; not organic—as other prepared roofings which are made of paper pulp, rag stock, shoddy and similar perishable materials. It has no inflammable felts to burn—no tar to melt or "run"—no materials affected by rot or rust or the action of acids or stable fumes.

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 16 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/16

J-M Asbestos Roofing will ordinarily last as long as the roof boards to which it is attached. We have hundreds of letters testifying to the great durability of our roofing.

NO COATING OR PAINTING REQUIRED

Paint is absolutely essential to the ordinary ready roofing to prevent rot, and to metal roofing to prevent rust. In such cases the life of the roof depends on the *paint*—a very delicate and uncertain form of protection from the weather. Such roofings must be continually coated—usually every year or two—to keep them in even fairly serviceable condition.

Not so with J-M Asbestos Roofing, because painting or coating is unnecessary, due to the fact that this roofing is *mineral*. There is nothing about it to rot, rust or disintegrate in any way. Other manufacturers may claim that theirs do not require coating, but any intelligent man will understand that organic materials cannot stand exposure to the weather without some such protection.

The cost of ordinary roofing, (with coating, labor and repairs added) in 10 years *will amount to twice the purchase price of* J-M Asbestos Roofing. This explains why our Roofing is the "cheapest-per-year" Roofing on the market.

When J-M Asbestos Roofing is once applied—expense stops.

ATTRACTIVE APPEARANCE WITHOUT PAINTING

The white top, weather surface of J-M Asbestos Roofing gives it a neat and attractive appearance—which cannot be secured with ordinary roofings (which

are usually black) without additional cost of painting.

This Roofing is noiseless when rain falls upon it, which is not the case with many other kinds, such as metal, shingle and slate roofings.

KEEPS OUT THE COLD IN WINTER AND THE HEAT IN SUMMER

Asbestos being the best practical insulator known—J-M Asbestos Roofing and Asbestoside (see page 30) do more than act as a mere protection against rain and snow. They keep out the cold in winter and the heat in summer, making the building comfortable at all times. In addition to the insulating value of Asbestos, the white top weather surface reflects the sun's rays which also tends to keep the interior of the building cool and comfortable during the hot summer months.

ADAPTED TO ALL CLIMATES AND WEATHER CONDITIONS

J-M Asbestos Roofing contains no coal tar or similar products affected by extreme weather conditions, hence it will not "run" under extreme heat, nor crack from extreme cold. It is particularly adapted for tropical countries or where exposed to severe snow storms in cold weather.

In some of the western states, the temperature in summer varies from 110 degrees at noon to 60 degrees at night, or an alternate heating and cooling covering a range of 50 degrees F. It has been found that J-M Asbestos Roofing is the *only prepared roofing on the market which will withstand such extreme temperature variations.*

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 17 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/17

EASILY APPLIED BY ANYONE

J-M Asbestos Roofing is shipped complete and ready to apply with nails and lap cement. *A hammer and brush are the only tools necessary.*

A special feature of J-M Roofing is the Double Galvanized Nail which we furnish. This nail has an extra large head, as shown in cut, which does away entirely with the unsightly tin cap ordinarily used, which quickly rusts out. This nail also insures a waterproof joint, as there is no leakage around the nail head as with tin caps. The J-M Nail is extra heavy galvanized to prevent rusting, and is the most expensive roofing nail that can be bought.



J-M Nail.

J-M Lap Cement, which is also furnished free with the Roofing, is far superior to the ordinary kind, and requires no heating or any preparation, being all ready for the brush.

HOW J-M ROOFING IS MADE

The basis of all J-M Asbestos Roofing is Pure Asbestos. This material is worked into sheets, after which each sheet is individually saturated with J-M Weather-proofing Compound. Several layers of these weather-proof sheets are then assembled with alternate layers of the highest grade asphalt. The result is a solid, homogeneous mass of asbestos and asphalt cement, which resists fire, water, acids and the gases of combustion.

On account of the difficulty of obtaining a sufficiently high grade of asphalt in the market, we have installed, at considerable expense, a complete asphalt

refinery. By importing our asphalt in the crude state and refining it ourselves we secure an absolutely pure Asphalt.

The crude Asbestos is shipped from our mines in Canada and the refined Asphalt from our refinery in New Jersey—direct to our factories at Brooklyn, N. Y., and Milwaukee, Wis., where it is manufactured into J-M Asbestos Roofing.

It is apparent that every process of manufacture, from the crude materials into the finished product, is *directly under our own supervision.* This enables us to maintain a uniformly high standard of quality in our Roofing at all times, and to give our customers the benefit of the best materials at the lowest prices.

J-M BRANDS

Although we furnish a variety of brands of J-M Asbestos Roofing, it should be distinctly understood that *there is but one quality.* The difference between the brands consists only in the number and arrangement of the plies. Where maximum durability is desired the four-ply brands are recommended, while for lighter and more temporary construction, the lower priced grades will be found satisfactory.

Remember, we have *a Roofing adapted for every requirement of farm buildings,* from the most modest chicken house to the best country residence.

Heavy Brooks Brand. An all Asbestos and Asphalt Four-ply Roofing, shipped in sheets, so that it will always lie flat. Does not require unrolling. This Roofing is suitable for steep surfaces, laid white side to the weather. On flat surfaces having a pitch of less than 2 inches to the foot, the black side should be laid to the weather.

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 18 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/18

STANDARD-MANVILLE BRAND. A heavy four-ply Roofing furnished in rolls consisting of three plies of Asbestos and Asphalt reinforced with heavy burlap, saturated. The burlap gives it additional strength, adapting it particularly for piazzas, where the roofing is walked upon by window washers, etc. Largely used on country residences, barns and similar farm buildings.

THREE PLY BROOKS. A very permanent Roofing when laid over good, smooth sheathing boards. In many hundreds of cases this Roofing has been in use for upwards of twelve years without any attention or repairs on the part of the owner. While not as serviceable as Heavy Brooks Brand, owing to its lighter weight, it is made of exactly the same materials.

CENTURY BRAND. This consists of three plies of Asbestos, saturated, and separated by alternating layers of Asphalt. This Roofing is used very extensively for poultry houses, sheds, etc., and invariably gives perfect satisfaction.

We have a variety of brands in addition to those listed above and will furnish full information and prices on request.

Write for catalog of J-M Asbestos Roofing.

ASBESTOSIDE

AN ASBESTOS WALL SIDING FOR FACTORY PLANTS WAREHOUSES, BARNS, ETC.



Showing the application of "ASBESTOSIDE"

ASBESTOSIDE is recommended as a siding in place of clapboards, shingles and sheet iron wall coverings, because of its lower first cost, greater durability and weather-proof and fire-resisting properties. ASBESTOSIDE occupies the same position with respect to other siding materials as J-M Asbestos Roofing does in the roofing line. It is easily, cheaply and quickly applied, extremely durable and absolutely waterproof. ASBESTOSIDE adds to the attractive appearance of a building and requires no coating or painting.

Regularly furnished in flat sheets, 32 by 50 inches, and 16 by 50 inches, or cut to smaller sizes, if desired. Furnished in three brands as follows:

J-M STANDARD BRAND. Composed of three separate plies of asbestos felt, with heavy burlap center to give additional strength—the whole cemented together with J-M Waterproof Compound.

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 19 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/19

J-M Shield Brand. Similar to "Standard" but having four separate plies of asbestos felt, but no burlap center.

J-M Star Brand. Similar to "Shield" Brand, except that it has three plies of asbestos felt, instead of four.

Asbestoside is shipped in crates, complete with special large head galvanized nails. These nails avoid the necessity of tin caps and give a very neat finish to the building.

Write us for samples and prices, furnished on request.

J-M POINT-TITE ROOF CEMENT

The very best cement for pointing up tin work, slate work or flashings, where a cement is required that will stand the expansion and contraction caused by changes of the weather. This Cement has been on the market for over forty years, and has always been found, after years of wear, to be full of life and the essential oils which it contains.



Put up in plastic form and remains elastic. Ready for application with trowel or knife.

Furnished in Brown or Black, as ordered.

J-M REGAL ROOFING

"THE ROOFING WITH LIFE"

Regal Roofing is the *king* of all wool felt, smooth surfaced and so-called "rubber" roofings, because it is far superior in durability. It is called "the roofing with life" because it does not dry out and crack, but retains its "life" indefinitely. This is due to the peculiar asphalt used in the saturation of the body felt, which is softer than the outer coating, and which gradually—but very slowly—gives up its oils and thus continually renews the coating—in this way preserving and protecting the outer surface of the roofing from the heat of the sun and other climatic conditions.



Regal Roofing is composed of natural asphalts (genuine Trinidad Lake asphalt being its base), properly processed and combined so as to withstand oxygen, sunlight, acids, wind, rain, snow, heat, and cold. It is highly fire-resisting. The roofing is thoroughly saturated with asphalt of a non-volatile nature and also heavily coated with a compound composed of the same asphalt. Trinidad Lake asphalt has been extensively used for the past thirty years for street paving purposes, where the conditions are much more severe than in roofing, and it has proven its perfect adaptability for such requirements. As a result, this asphalt has been selected by us as the best weather-proofing compound obtainable.

The body felt of Regal Roofing is a high quality wool felt, which is manufactured in our own mills. The asphalt is also produced in our own refineries and as a result Regal Roofing is manufactured complete from the crude materials in our own factories and under our own personal supervision. Thus we are able to produce not only the best grade of roofing of this class which can be obtained, but also to offer it at the lowest price consistent with the high quality of the product. While low in price, Regal Roofing should not be confused with the many so-called "cheap" roofings, most of which are made only to sell, as experience has shown that they are dear at any price.

Every roll of Regal Roofing is covered by a broad, liberal guaranty which we issue direct to the user and which fully protects him.

Regal Roofing gives excellent service in any climate—any-

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 20 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/20

where. It can be applied by anyone, as full directions are supplied with each roll. Put up in rolls of 216 square feet (allowing 16 square feet for laps and flashings), also nails and liquid cement—all packed complete in a single package.

Samples and prices furnished on application.

J-M REGAL ROOF COATINGS

BLACK

Regal Roof Coating is recommended for roofs of all kinds, such as tin, sheet iron, felt and "rubber" type of ready roofings, as well as for all other conditions where protection from the elements is required.

This coating is made of pure asphalt and it is absolutely free from coal tar or pitch. The solvent used is a combination of pure linseed and other oils. This material is so refined that the essential oil will not be drawn out by heat and the coating will retain its waterproof properties much longer than any other similar product, making it the most economical coating to use. One gallon will cover one square of 100 square feet.

COLORED

COLORS: LIGHT RED, MAROON, BROWN, TERRA COTTA AND GREEN

Colored Regal Roof Coating is prepared especially for use on J-M Regal or other "smooth surfaced" or "rubber" roofings and metal roofs of all kinds. It is also recommended for J-M Asbestos Black Surfaced Roofings, where it is desired to secure artistic effects.

It forms an impervious, durable preservative coating, greatly prolonging the life of the roofing and protecting it from effects of the sun. The colors are beautifully clear and permanent, rendering a most attractive finish to any building.

SECTION 3

TRANSITE ASBESTOS SHINGLES

TRANSITE ASBESTOS WOOD

A FIRE-PROOF BUILDING LUMBER

EBONY AND OAK ASBESTOS WOOD

A FIRE-PROOF, ELECTRICAL INSULATION

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 21 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/21

TRANSITE ASBESTOS FIRE-PROOF SHINGLES



TRANSITE ASBESTOS SHINGLES and RIDGE ROLLS are made in various sizes, in colors to acceptably contrast with and conform to the surrounding structure. These SHINGLES are superior in every respect to any form of shingle now on the market.

TRANSITE SHINGLES are composed of pure, specially prepared asbestos fibres, selected with great care to obtain the maximum strength and fire-proof properties in combination with special binding and waterproof cements.

ADVANTAGES

TRANSITE ASBESTOS SHINGLES weigh less than slate, thus allowing for a lighter roof construction, which in many instances offsets the slight additional cost of these superior shingles. They are not affected by the severest climatic changes. Continual freezing and thawing does not affect them in any way. They can be cut very readily to fit odd corners around dormer windows, etc.

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909) Published by AsbestosClaims.Law
ACL Doc 21283 · Page 22 of 54 asbestosclaims.law/library/21283/22

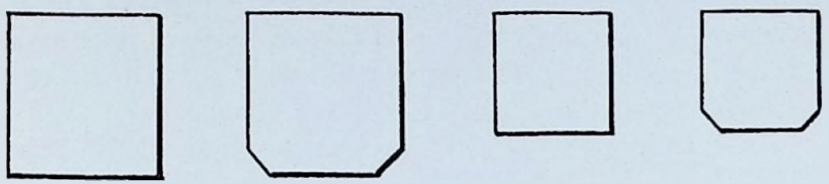
DURABILITY

TRANSITE ASBESTOS SHINGLES are indestructible. They are tough and elastic and are particularly adapted for the covering of roofs of buildings adjacent to the sea and are the only shingles that will withstand the action of salt air. The materials entering into their composition are fire-proof and the product is not affected by the ravages of time and elements.

TRANSITE ASBESTOS FIRE-PROOF SHINGLES

Standard Thickness 1/8 inch

No. 1	No. 2	No. 3	No. 4
16x16 ins.	16x16 ins.	12x12 ins.	12x12 in



Price List per Hundred Shingles

COLOR	No. 1	No. 2	No. 3	No. 4
Gray	$ 8.75	$ 9.00	$ 5.00	$ 5.25
Slate	12.25	12.50	6.75	7.00
Red	12.25	12.50	6.75	7.00

Weight and Number Required

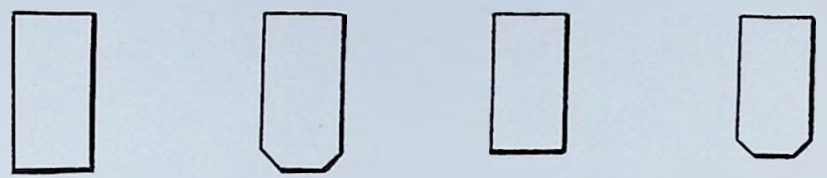
	Per Finished Square Number	Approx. Weight	Gauge	Average Weight Per Hundred
No. 1	130	387 lbs.	7x16 ins.	298 lbs.
No. 2	130	374 lbs.	7x16 ins.	288 lbs.
No. 3	240	400 lbs.	5x12 ins.	167 lbs.
No. 4	240	384 lbs.	5x12 ins.	160 lbs.

The above table used only when figuring American method.

TRANSITE ASBESTOS FIRE-PROOF SHINGLES

Standard Thickness 1/8 inch

No. 5	No. 6	No. 7	No. 8
8x16 ins.	8x16 ins.	7x14 ins.	7x14 ins.



Price List per Hundred Shingles

COLOR	No. 5	No. 6	No. 7	No. 8
Gray	$ 4.50	$ 4.75	$ 3.50	$ 3.75
Slate	6.25	6.50	4.75	5.00
Red	6.25	6.50	4.75	5.00

Weight and Number Required

	Per Finished Square Number	Approx. Weight	Gauge	Average Weight Per Hundred
No. 5	260	387	7x8 ins.	149 lbs.
No. 6	260	361	7x8 ins.	139 lbs.
No. 7	343	397	6x7 ins.	116 lbs.
No. 8	343	370	6x7 ins.	108 lbs.

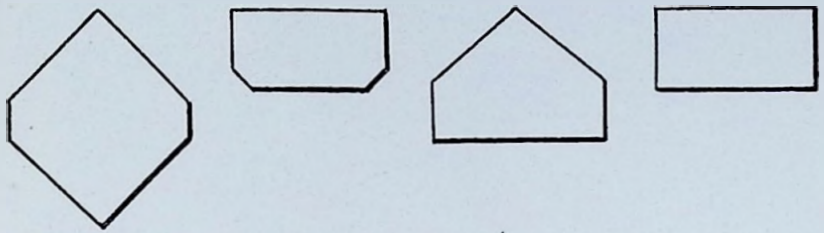
The above table used only when figuring American method.

Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/23

TRANSITE ASBESTOS FIRE-PROOF SHINGLES

Standard Thickness ⅛ inch

No. 9 16x16 ins. | No. 10 8x16 ins. | No. 11 13x18 ins. | No. 5 8x16 ins.



The above style Shingles required for Diagonal Method.

Nos. 5, 10, 11.....Eave Course Starters
No. 9.....Main Body Shingles

Price List per Hundred Shingles

COLOR	No. 9	No. 10	No. 11	No. 5
Gray	$ 9.00	$ 4.75	$ 8.13	$ 4.50
Slate	12.50	6.50	11.25	6.25
Red	12.50	6.50	11.25	6.25

Weight and Number Required

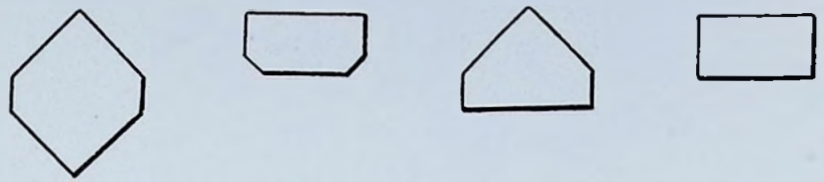
	Number Per Finished Square	Approx. Weight	Gauge	Average Weight Per Hundred
No. 1	87	250	13x13 ins.	288 lbs.

The weight of the squares abutting on the eaves will be slightly more, as No. 5 and No. 10 Shingles are laid without laps; see page 39.

TRANSITE ASBESTOS FIRE-PROOF SHINGLES

Standard Thickness ⅛ inch

No. 12 12x12 ins. | No. 13 6x12 ins. | No. 14 13½x9½ ins. | No. 15 6x12 ins.



The above style Shingles required for Diagonal Method.

Nos. 13, 14, 15.....Eave Course Starters
No. 12.....Main Body Shingles

Price List per Hundred Shingles

COLOR	No. 12	No. 13	No. 14	No. 15
Gray	$ 5.25	$ 2.75	$ 4.75	$ 2.50
Slate	7.00	3.75	6.25	3.50
Red	7.00	3.75	6.25	3.50

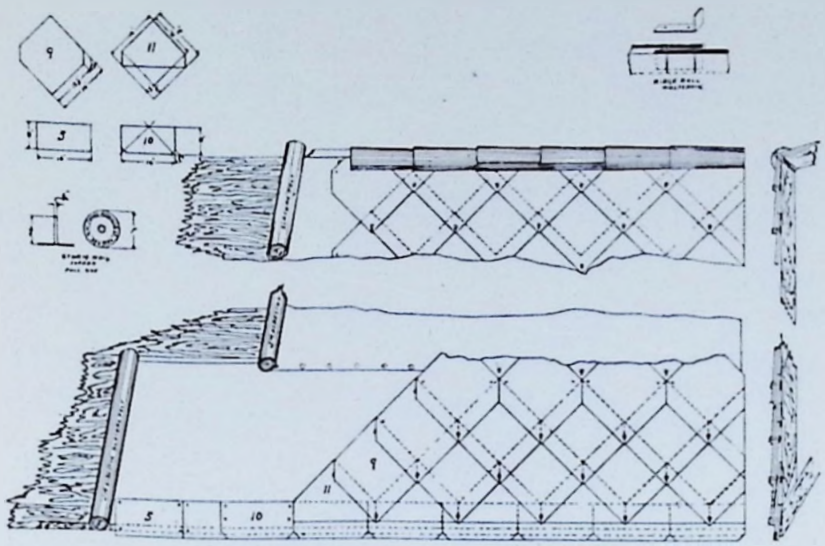
Weight and Number Required

	Number Per Finished Square	Approx. Weight	Gauge	Average Weight Per Hundred
No. 12	160	256	9½x9½ ins.	160 lbs.

The weight of the squares abutting on the eaves will be slightly more, as No. 13 and No. 15 are laid without laps; see page 39.

Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/24

DIAGONAL METHOD OF APPLYING TRANSITE ASBESTOS SHINGLES



HIP AND RIDGE ROLLS, AND ACCESSORIES REQUIRED DIAGONAL METHOD

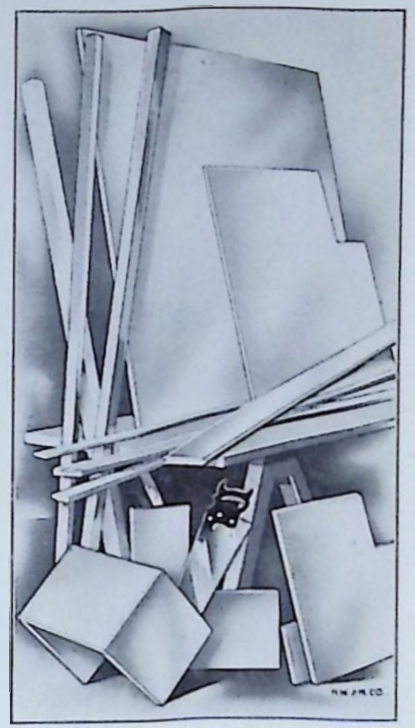
Standard Sizes.....(⅛ in. thick)
Length.....16 ins.—12 ins.—96 ins.

Gray	.....10 cents	per linear foot
Slate	.....12 cents	per linear foot
Red	.....12 cents	per linear foot
Coppersstorm Nails, (per 100)	.....32 cents	
Copper Fasteners for Ridge Roll, per 100	.....35 cents	
Galvanized Iron Needle Points, per lb..	6 cents	

TRANSITE ASBESTOS WOOD AS A BUILDING MATERIAL

The constantly increasing fire loss of the country, amounting to several hundred millions during the year 1906, demands the lessening of the danger of ignition and spreading of flames, by means of a structural material, which, in itself, is absolutely fire-proof.

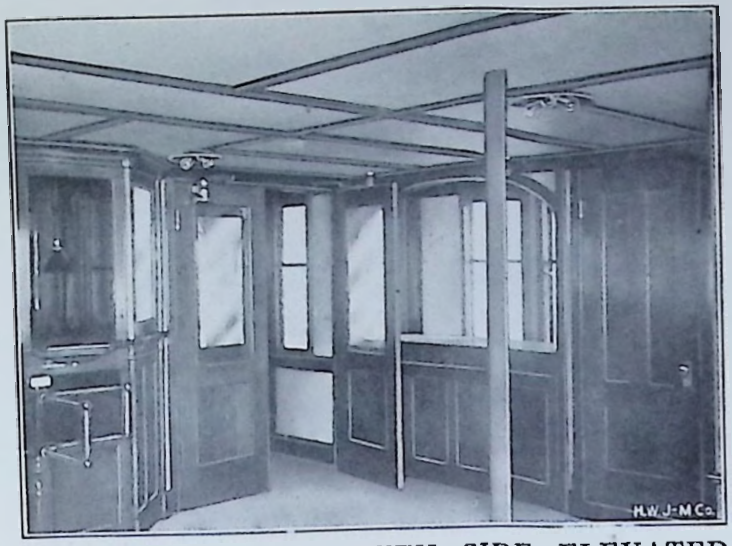
Professor Charles L. Norton, of the Massachusetts Institute of Technology, after years of laborious research, has produced an Asbestos Wood that is mineral in character, made principally from asbestos fibre and having the physical characteristics of ordinary wood.



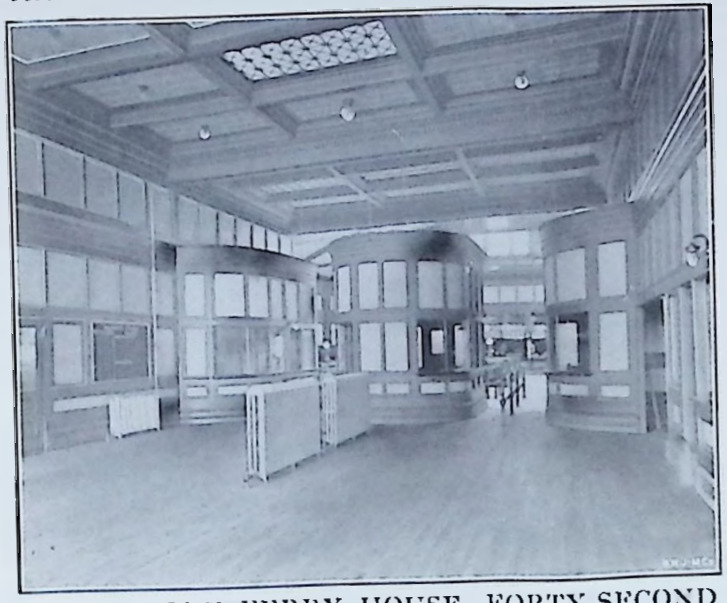
Asbestos Wood for building construction

Transite Asbestos Wood is harder than ordinary wood and takes a higher polish. Its adaptability to manipulation by means of wood-working tools permits of its use in almost all cases where wood is employed. It has a fiber strength under transverse loads of about 3,500 pounds, being about two-thirds as strong as ordinary wood. Nails can be driven into it with the same ease as in oak or maple. Screws hold distinctly better in Transite Asbestos Wood than in ordinary wood and it has much less tendency to warp.

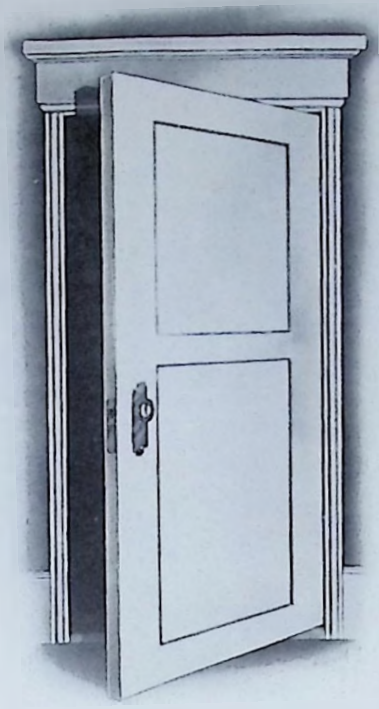
H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 25 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/25



STATION OF THE SOUTH SIDE ELEVATED R. R. CO., CHICAGO. Constructed of *Transite Asbestos Wood.*



WEST SHORE FERRY HOUSE, FORTY-SECOND STREET, NORTH RIVER, N. Y. CITY. The panels shown in this cut are *Transite Asbestos Wood.*



Door and Door Frame made of Asbestos Wood

TRANSITE ASBESTOS WOOD takes paint or varnish readily; it is not injuriously affected in any way by exposure to the weather—in fact, exposure improves it. There is absolutely nothing in the material that can burn, and tests that have been conducted have proved that it is a far better resistant of fire than any substitute for wood that has ever been placed on the market.

TRANSITE ASBESTOS WOOD is adapted to general forms of construction where ordinary wood has been used, and where absolutely fire-proof structures are desired. It is particularly recommended for the following:

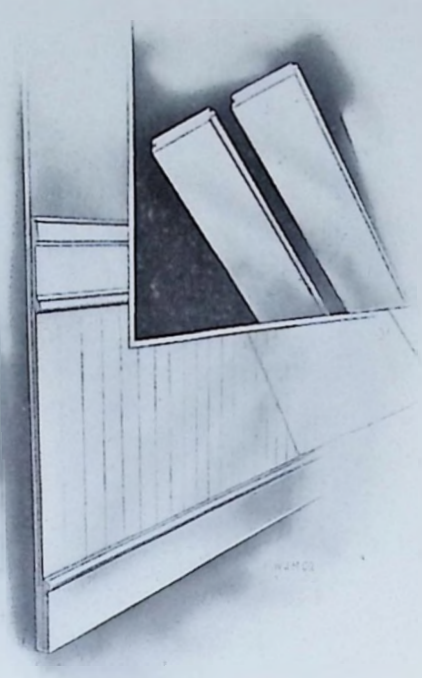
Roofing
Sheathing
Flooring
Fire-Proof Partitions
Fire Doors
Window Casings
Wainscoting
Baseboards
Fire-proof Mouldings
Ceilings
Portable Houses and Garages
Fire-proof Cabinets
Boxes and Receptacles
Acid and other Tank Linings, Etc.

It is as readily applied to metal as to wooden frame construction.

Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/26

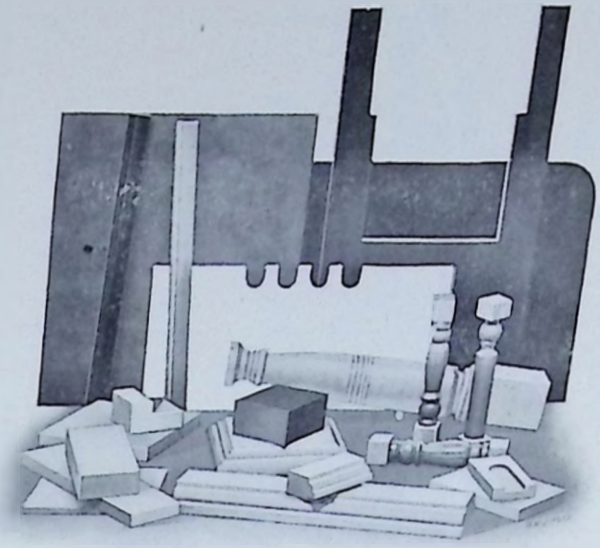
WAINSCOTING, BASEBOARDS, ETC.

The accompanying cut illustrates the use of TRANSITE ASBESTOS WOOD for wainscoting and interior finish and paneling. The wainscoting is constructed of tongued and grooved boards, finished or paneled with moulding, in keeping with the general interior design, and with an ASBESTOS WOOD baseboard. TRANSITE ASBESTOS WOOD is furnished in practically all of the varieties of moulding in which ordinary wood is supplied and may be used for window and door casings, and other similar constructions, which will suggest themselves to the architect and builder. Can be used for covering exposed beams and grill work, as it can be finished in mission oak or any desired grain.



Asbestos Wood Wainscoting
(tongued and grooved)

GRAINING AND FINISHING



Showing how Asbestos Wood may be manipulated with ordinary wood-working tools

TRANSITE ASBESTOS WOOD is capable of taking, at very little labor and expense, a high polish, such as is not obtainable with the best wood, and considering its fire-proof qualities, its cost finished, compared with the cost of hard woods or wood veneered, is not excessive. It can be finished in any graining or color desired, by any painter or wood grainer. It costs much less than marble or slate, is easier and cheaper to apply, and there is less loss from breakage.

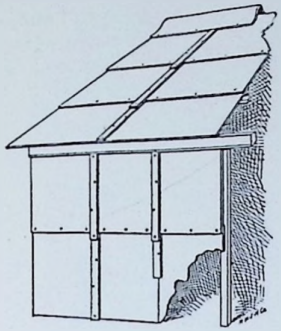
FIRE DOORS AND STOPS

TRANSITE ASBESTOS WOOD, because it is so easily worked with ordinary wood-working tools, can be made into fire-proof doors and barriers for factory purposes and for interior doors for fire-proof buildings.

Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/27

ROOFING AND SIDING

The cut shows TRANSITE ASBESTOS WOOD applied as a roofing and siding. We recommend the application of ASBESTOS WOOD on wooden roof purlins by means of ordinary wire nails or wood screws, the material to be bored for the nails and screw-heads to be counter-sunk. For application on metal roofs, the ASBESTOS WOOD should be fastened with small stove bolts—the WOOD being drilled to receive the bolts and the heads counter-sunk. The main roof sheets should be laid as indicated in the cut, with the horizontal joints lapped not less than 4 inches, and the vertical joints butted together in our Alba Fire- and Waterproof Cement. The vertical joints should then be covered with a lap strip not less than 4 inches in width, the lap strip to be laid in Alba Fire- and Waterproof Cement and fastened by means of wood screws to the main sheet beneath. We recommend the use of 3-8 to 1-2 inch material for the main sheets and batten strips. The same construction should be followed out for siding. If, however, a panel effect is desired, the sheets for siding may be butted, and the vertical and horizontal joints covered with batten strips.



Showing method of applying ASBESTOS WOOD as a roofing and Siding.

ASBESTOS WOOD in narrow strips is also suitable to take the place of wood in producing the half-timber effect with plaster in either interior or exterior construction.

SPECIAL USES

With TRANSITE ASBESTOS WOOD Panels and Mouldings, office partitions that are absolutely fire-proof and that have a high degree of sound-deadening properties are possible. It can also be made into fire-proof receptacles for oily and other waste in factories, for filing cabinets, document boxes for the protection of valuable papers, etc. Can be used for cable ducts, pipe conduits, also as a lining for elevator and dumb-waiter shafts, fire-places, etc. Can be made into many special moulded shapes, such as sad iron rests, heat-proof handles for kitchen utensils, etc. Also valuable for smoke stacks for chemical factories and laboratories, and engine-houses; hoods over cooking ranges, blacksmith forges, and for-fire stops between floors; laying out heated materials, glassware, etc., etc.

TRANSITE ASBESTOS WOOD, in addition to being fire-proof, is permanently moisture-resisting, and is not affected by extremes of temperatures from the coldest to the hottest weather. Climatic changes harden and toughen ASBESTOS WOOD, and after a period of time it becomes impervious to the elements, making it adaptable to many purposes, where ordinary wood could not be used. Its weight, as compared with tiling, slate, etc., is much in its favor, as when used for roofing, siding, etc., the supporting frame-work can be made of much lighter material, giving greater interior space and reducing the cost of the structure.

See price list page 48.

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 28 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/28

A REMARKABLE FIRE TEST

The following test was made to demonstrate the fire resisting properties of TRANSITE ASBESTOS WOOD under *actual fire conditions*. The results of this test should convince even the most skeptical architect or engineer of the absolute fire-proof properties of this material. No other known form of construction could withstand the conditions to which ASBESTOS WOOD was submitted in this test.

For the purpose of test there was constructed entirely of ASBESTOS WOOD, a building 9 feet square, with windows, doors and roof; the doors being hung with ordinary brass hinges, screwed on. When the building was completed, a sufficient amount of cord wood, to create a big fire, was placed inside of the building and ignited. This occurred in the midst of a driving snow storm which continued during the test.

While in two minutes the wire glass windows began to crack, the ASBESTOS WOOD was unaffected. The fire test was continued for one hour and fifteen minutes and during this time pyrometer readings were taken showing temperatures ranging from 1200 to 2000 degrees F. Water was thrown on both the inside and outside of the house under about 50 lbs. pressure during the latter part of the test. No warping was noticeable and practically no heat was radiated through the structure. It was a noticeable fact that during the test the side walls of the house were sufficiently cool to permit touching the same with the hand without injury.,

One of the doors, a tin covered fire door, on examination after test, showed that the wooden centre was entirely gone and the edges nearly destroyed. The ASBESTOS WOOD mill door was found to be in good condi-

tion with the exception of slight scaling or chipping on inside (1-8 in. to 1-4 in.) although it was not noticeably warped and no flames penetrated through same. The ASBESTOS WOOD panel door which was used in the construction was in practically as good condition as when put in, except it was slightly warped, but this was hardly discernable after it had cooled, in fact this door could be opened and closed as readily after as before the fire. A year later the house was still standing and in good condition.

This test showed conclusively that ASBESTOS WOOD will stand exposure to fire at extreme temperatures for a considerable period of time without warping or distorting or weakening the material; also that it is absolutely non-inflammable, and that the application of water, to ASBESTOS WOOD while hot, will not crack or disintegrate same. It also demonstrates that doors made of this material are so fire-proof that they can be used as fire doors for factories, houses, offices, hotels, etc., etc.

PRICE LIST OF SHEETS

Standard Size Sheets, 36″ x 48″, 42″ x 48″ and †42″ x 96″.

Thickness	Plain		Ebony and Oak	
	Price per Sq. Ft.	Weight per Sq. Ft.	Price per Sq. Ft.	Weight per Sq. Ft.
1/8 inch	$ .10	1 lb.	°$ .30	1¾ lbs.
1/4 "	.20	2 lbs.	.40	2½ "
3/8 "	.30	3 "	.50	3¾ "
1/2 "	.40	4 "	.65	5 "
5/8 "	.50	5 "	.80	6¼ "
3/4 "	.55	6 "	.85	7½ "
7/8 "	.60	7 "	.90	8¾ "
1 "	.65	8 "	.95	10 "
1¼ "	.70	10 "	1.05	12½ "
1½ "	.80	12 "	1.25	15 "
1¾ "	.90	14 "	1.35	17½ "
2 "	1.00	16 "	1.60	20 "

°Not made in Oak Finish. †42″ x 96″ sheets not made less than ¼″ thick.

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 29 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/29

SECTION 4



J-M ASBESTOS WALL PLASTER

STANDARD ASBESTOS STUCCO

ASBESTUCCO

ASBESTOS THEATRE CURTAINS

Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/30

J-M ASBESTOS WALL PLASTER

Asbestos Wall Plaster is composed of asbestic and lime. Two grades of Asbestic are furnished for this purpose—"Rough" for the scratch coat and "Finish" for the finishing coat.

Asbestic is an admirable non-conductor of heat and cold. It forms an effective barrier to the progress of flame from one burning room or apartment to another. In case of fire, it is particularly valuable for preventing the transmission of heat to columns, girders and beams or to adjoining rooms, as, for instance, in factories, hotels, etc. As a non-conductor of heat, it presents another important advantage in the saving of fuel.

Owing to its felt-like nature, it is a non-conductor of sound. For this reason it is particularly adapted for walls and ceilings in hotels, hospitals, schools, music rooms, churches, etc.

ODOR-PROOF

Furnace and engine rooms or any location in factories or railroad shops requiring protection from acids, fumes, coal gases or similar destructive agencies should be plastered with Asbestos Wall Plaster.

NO CRACKING, FALLING OR DISCOLORATION OF CEILINGS

Being homogeneous and of a tough, fibrous, felt-like nature, it possesses great elasticity, which prevents chipping, cracking and crumbling. It weighs less than ordinary lime mortar plaster, hence is especially valuable for ceilings. There are on record several instances where buildings have been flooded with water without injury to the Asbestos Plaster.

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909) Published by AsbestosClaims.Law
ACL Doc 21283 · Page 31 of 54 asbestosclaims.law/library/21283/31

ECONOMY OF REPAIRS

The cost for repairing is insignificant even under great difficulties. Damages of any kind are easily repaired. The patches are as sound as the rest of the job.

HOW FAR IT WILL GO

A given weight of Asbestos Plaster will cover more surface than any other plastering material. As a guide to its covering capacity, it may be calculated that upon wood lath it will cover with 5-8 inch grounds, two coats, 75 to 85 yards per ton of 2,000 pounds.

It is easily "worked," spreads smoothly and is much lighter in weight than ordinary plaster. In large structures, this difference in weight is sufficient to materially modify the calculations of the architect in superstructure to the advantage of the builder and owner.

NO WASTE MATERIAL

Nearly all so-called "patent" plasters must be used as soon as mixed, otherwise they are a total loss. Asbestos Plaster can stand unused, after being mixed, for days and even weeks, without loss. It is necessary only to temper the plaster afresh, as it does not become lumpy. If dropped in handling it need not be wasted, for whatever has been dropped may be gathered up for subsequent use. Contractors will appreciate the economy of this.

FOR INTERIOR USE

DIRECTIONS FOR APPLYING

Asbestic for Wall Plaster is shipped in bags containing 100 pounds each. The bags are not returnable.

For scratch and roughing coat on wood or metal lath. Slack 350 to 400 lbs. of best quality rock lime and run through a sieve into one ton (2,000 lbs.) of Rough Asbestic. Add more water, if necessary, and hoe thoroughly. Stack for at least twenty-four hours before using. No sand is required, but it is not objectionable to use usual amount of hair.

Wood lathing should be spaced the same as for lime mortar. Grounds to be 1-2 to 5-8 inch. Steel columns, beams, etc., should be covered with metal lath.

For simple, inexpensive single coat work. We suggest for this the following: Let the plasterer apply a coat of fairly stiff "Asbestic" and have close at hand some Asbestic Finish mixed softer, for a skimming coat, which he can trowel smoothly. This improves both the quality and appearance of the job.

FINISHING COAT

Use Asbestic Finish, mixed as above, and trowel well. Apply a thin coat, just sufficient to fill the pores, and then fill out level to the grounds. Trowel thoroughly. Figure about one and a half pounds Asbestic Finish to square yard of surface. No plaster of paris is required, but a quick drying and an attractive finish may be had, if for any reason especially desired, by gauging with such plaster. For such a finish, take two parts of the foregoing mixture of Asbestic Finish and lime, to one part plaster of paris.

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 32 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/32



RESIDENCE OF MR. W. W. ORR, SCARSDALE, N. Y.—Covered with *Asbestos Stucco.*



THE WAYSIDE INN, ELLENVILLE, N. Y. Covered with *Asbestos Stucco.*

J-M ASBESTOS STUCCO

WEATHER-PROOF—FIRE-PROOF—INDESTRUCTIBLE

Asbestos Stucco is composed principally of pure, ground asbestos fibrous rock. The sharp granules of rock and the mass of short asbestos fibres produce an exterior plastic covering without an equal in durability.

Asbestos Stucco combines toughness with solidity; nails may be driven into it and withdrawn without danger of cracking the surface.

There is nothing in Asbestos Stucco to decompose, therefore it will not chip, crack, or crumble away. Water, or the severest weather conditions do not affect it. It is absolutely fire-proof, and water will not damage it, even if applied when it is heated by flames from adjacent buildings.

It dries with a pleasing gray white effect, and does not tarnish or discolor with age.

CHEAPLY AND QUICKLY APPLIED

The covering capacity of Asbestos Stucco is greater than that of any other exterior plaster or stucco. Weighs considerably less than ordinary cement mortar. Its lightness facilitates the application; the saving in labor often being as high as 15 per cent.

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 33 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/33

GRADES

STANDARD ASBESTOS STUCCO—Consists of Rough Asbestic (especially pulverized Asbestos Fibre Rock), shipped in 100 lb. bags, to be mixed on the job with Portland Cement.

ASBESTUCCO—Is composed of Rough Asbestic thoroughly mixed with special hydraulic and waterproofing cement. Shipped in 100 lb. bags ready for application.

STANDARD ASBESTOS STUCCO

DIRECTIONS FOR MIXING AND COVERING CAPACITY

To one bag of ROUGH ASBESTIC add one-half bag of high grade Portland Cement, mix thoroughly in a dry state, and add sufficient water, so that mixture can be applied readily.

On wire lath this mixture will cover about 50 square yards per ton.

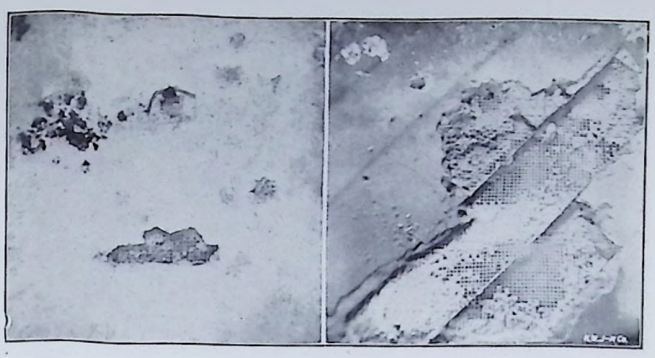
ASBESTUCCO

DIRECTIONS FOR MIXING AND COVERING CAPACITY

ASBESTUCCO requires only the addition of sufficient water to make a mortar that can be readily applied.

The covering capacity on wire lath is about 50 square yards per ton.

STANDARD ASBESTOS STUCCO VS. COMMERCIAL STUCCO



At a test made at our Brooklyn factory, June 4, 1908, to determine the relative values of the commercial grade of regular stucco and STANDARD ASBESTOS STUCCO for fire-proof partitions in general building construction, it was proved conclusively that partitions and walls made of STANDARD ASBESTOS STUCCO and EXTERIOR STUCCO are far superior to those where regular commercial stucco is used. It was proved also that the ASBESTIC PLASTER partition is stronger and resists fire better.

MATERIAL TESTED

One partition approximately 4 feet square, composed of 2 parts ROUGH ASBESTIC and 1 part Portland Cement, applied to 2-inch angle iron frame and wire lath. Plaster built up to thickness of 2 inches.

Also one partition of the same construction except that regular stucco was used instead of ROUGH ASBESTOS STUCCO.

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 34 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/34

The partitions were so erected that each formed the side of an inverted V. The fire was started underneath them at 3:15 p. m., and for nearly an hour they were exposed to the full effect of the heat and flames.

EXTERIOR TEMPERATURE

TIME	ROUGH ASBESTIC	REG. PLASTER
3.30	158 deg.	168 deg.
3.40	160 "	178 "
3.41	160 "	187 "
3.46	159 "	203 "
3.50	159 "	215 "
3.52	159 "	219 "
3.57	158 "	223 "
4.00	161 "	238 "
4.04	163 "	258 "

The interior temperature was 1,500°.

At 4:00 o'clock, water was thrown on the outside surfaces of both partitions, after which slight cracks were noted in the surface of each.

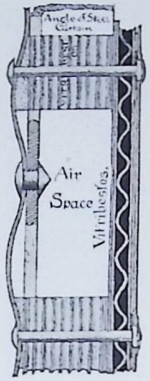
At 4:15 water was turned on until the fire was extinguished, after which the partitions were examined carefully and it was found that the regular plaster partition had practically gone to pieces and the life of the cementing material was lost, leaving hardly anything except sand, the particles of which could be crumbled between the thumb and finger very readily.

The Asbestic Plaster partition showed a loss of strength of apparently one-half.

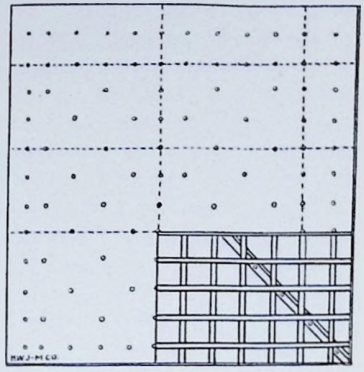
Both partitions were wet when this examination was made and when the Asbestic partition had dried out it was practically as strong as before the test.

VITRIBESTOS THEATRE CURTAINS

In a number of the larger cities of the country the city regulations require that the fireproof curtains in theatres be made in the form of a portable fire wall. To meet these requirements we furnish our Vitribestos Theatre Curtains, which are constructed of Vitribestos sheets and steel plates held rigidly together by an angle iron frame work, as illustrated below.



Sectional View



Angle Iron Construction

These curtains meet the following city regulations: a curtain made of corrugated steel riveted to angle irons and backed with a two-inch air space, by an asbestos structure, to be subjected after erection to the following test: A blower to give 1,500 degrees F. to be played for 15 minutes on the asbestos or stage side of the curtain, the iron surface on the audience side not to show over 500 degrees F. Every curtain in use has been tested in this manner, and the highest temperature ever shown on the audience side was 155 degrees instead

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 35 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/35

of 500 degrees allowed; usually 136, 140 or 145 degrees was shown.

Vitribestos Theatre Curtains are in use in a number of cities, notably Chicago, where 33 theatres are equipped with them.

Write for prices and full particulars.

J-M ASBESTOS THEATRE CURTAINS

J-M Asbestos Cloth Theatre Curtains are made of pure Asbestos fabric interwoven with wire, and under actual fire conditions have never failed.

J-M Theatre Curtains are constructed in the most secure form by lapping each breadth of cloth so far that, when sewn with pure Asbestos Sewing Twine, all possibility of the seams pulling apart is eliminated. The edges on each side of the ends of the curtain are so reinforced, without the use of canvas or other inflammable material, that, when the rings for the guide wires are securely sewn in place with fire-proof Asbestos Twine, they will hold the curtain taut and prevent the curtain from bellying.

The curtains are made with a pocket at the bottom for an iron rod or gas pipe which acts as a weight, also spreading the curtain flat and even. A similar pocket is also arranged at the top, for an iron rod or gas pipe to connect with the rigging chains.

We suggest that a clutch locking device should be used on the stage flooring so that when the curtain reaches the floor it will drop into the clutch and prevent the wind from blowing it out of place. J-M Curtains are constructed in the most approved manner and are up to date in every respect.

SECTION 5

J-M SANITOR SEATS, COVERS AND TANKS

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 36 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/36

J-M SANITOR SEATS, COVERS AND TANKS

INDESTRUCTIBLE SEATS AND TANKS

The weak point in the perfection of modern sanitary plumbing has been the Seat and Tank. In SANITOR goods, we offer a radical improvement; one which even surpasses the remarkable advance in plumbing sanitation.

WARRANTED NOT TO SPLIT, CRACK OR WARP

SANITOR goods are made of wood fibres, indurated by our patented process, and moulded under heavy hydraulic pressure. Being moulded in one piece, there are no joints to become unglued, no cracks to open up and collect disease germs. Moisture, heat or urine will not affect them. We warrant this Seat not to warp or split for a period of five years, and will replace any Seat that does warp or split under ordinary service within that period.

IDEAL CONSTRUCTION

The fact that the Seats are homogeneous and will not warp or split, makes them indestructible and perfect in point of sanitation. The Tanks, being moulded solid without joints or metal lining, are ideal in construction. There is nothing about them to corrode or deteriorate in any way.

PERFECT AND DURABLE FINISH AND GRAIN

J-M SANITOR SEATS AND TANKS are furnished in Natural Oak, Golden Oak, Mahogany and White Enamel, or other finishes, as desired, by a special process

H. W. Johns-Manville Co.: Building Materials, Catal... Published by AsbestosClaims.Law
ACL Doc 21283 · Page 37 of 54 asbestosclaims.law/library/21283/37

by which the grain of the wood is mechanically transferred. This insures a perfect match to the regular wood finish of the building. In Oak we can furnish either quarter sawed or straight finish, as desired.

FINISHED COMPLETE

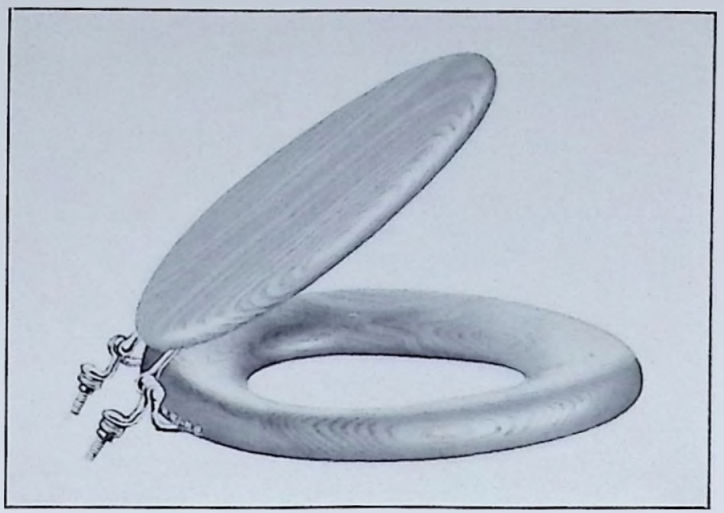
J-M Sanitor Seats and Tanks are furnished complete with our regular fittings and attachments. We have adopted as standard fittings, those which have proven most satisfactory to the trade at large and which we can safely recommend.

ECONOMICAL

Our large manufacturing facilities enable us to offer this line of goods at attractive prices, no higher than other high grade Seats and Tanks on the market. Their longer life makes them more economical in the end.

J-M SANITOR SEATS AND COVERS

COMPLETE WITH FITTINGS



		LIST PRICE
Style No. 100	Natural Oak with cover,	$5.00
Style No. 100A	Natural Oak without cover,	4.00
Style No. 101	Golden Oak with cover,	5.00
Style No. 101A	Golden Oak without cover,	4.00
Style No. 102	Mahogany with cover,	6.00
Style No. 102A	Mahogany without cover,	5.00
Style No. 103	White Enamel with cover,	7.50
Style No. 103A	White Enamel without cover,	6.00

Other patterns and styles of fittings and finishes furnished, where specified, at corresponding prices.

J-M SANITOR SEATS AND COVERS WITH SPECIAL ACID-PROOF FINISH

For factories, public comforts, schools, etc., where a lower priced seat without decorative finish is desired, we recommend Sanitor Seats in natural color with our special acid-proof glazed finish. This finish is unaf-

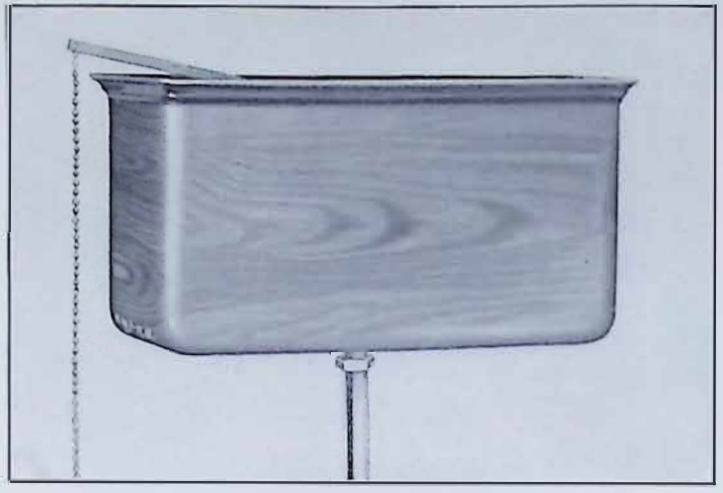
H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 38 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/38

fected by acids or alkalies, to which the seat may be subjected, permitting scrubbing with disinfectants.

Prices on application

J-M SANITOR HIGH TANKS

COMPLETE WITH FIXTURES



6 GALLON SIZE

(Approximate outside measurements, 20 x 11 x 10½ in.)

		LIST PRICE
Style No. 200	Natural Oak with standard fixtures,	$15.00
Style No. 201	Golden Oak with standard fixtures,	15.00
Style No. 202	Mahogany with standard fixtures,	16.00
Style No. 203	White Enamel with standard fixtures,	18.00

Top or bottom supply as required.

8 GALLON SIZE

(Approximate outside measurements, 20 x 12 x 11 in.)

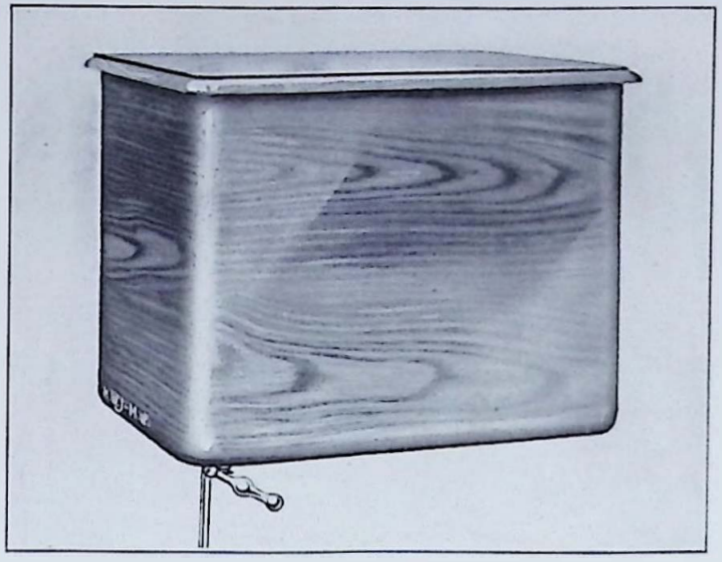
		LIST PRICE
Style No. 400	Natural Oak with standard fixtures,	$17.00
Style No. 401	Golden Oak with standard fixtures,	17.00
Style No. 402	Mahogany with standard fixtures,	19.00
Style No. 403	White Enamel with standard fixtures,	21.00

Top or bottom supply as required.

J-M SANITOR LOW TANKS

(Approximate outside measurements, 21 x 8 x 19 in.)

COMPLETE WITH FIXTURES



		LIST PRICE
Style No. 300	Natural Oak with standard fixtures	$20.00
Style No. 301	Golden Oak with standard fixtures,	20.00
Style No. 302	Mahogany with standard fixtures,	22.00
Style No. 303	White Enamel with standard fixtures,	24.00

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 39 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/39

SECTION 6



COLD STORAGE INSULATION

Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/40

KEYSTONE FOR COLD STORAGE BUILDINGS AND REFRIGERATORS

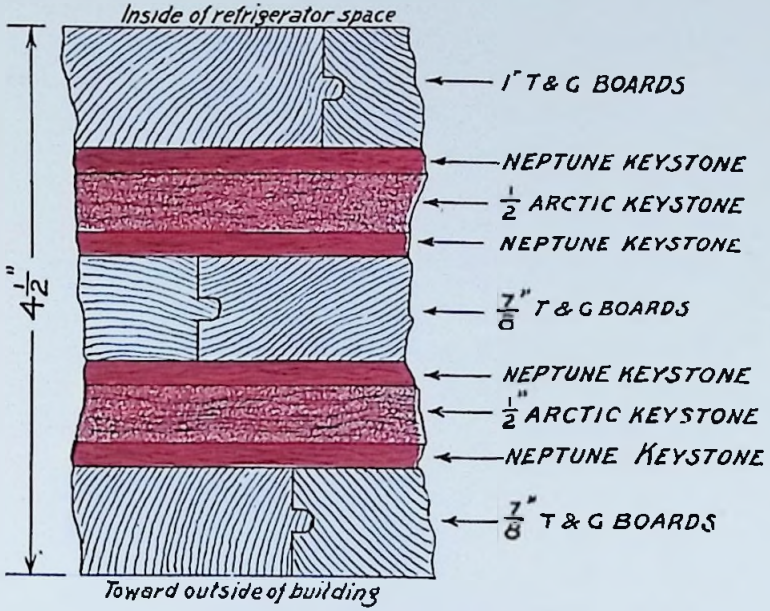
The subject of heat and cold insulation is a very interesting and important one, not only from the standpoint of economy, but because it contributes so much to the comfort of human life. The science of insulation has been, however, but little understood until within a comparatively recent date.

Refrigeration is nothing more nor less than the process of extracting heat, and its main commercial application is the preserving of perishable food products. To secure this most desired economy, the maximum of effort should be directed to refrigerating the products to be chilled and only the minimum to refrigerating the containing structure itself. In other words the cold storage structure should contribute as little heat as possible to the total sum to be extracted by the refrigerant.

The importance of good insulation is now so well understood that specifications are all along the lines of high efficiency. It has been found impossible to entirely prevent the passage of heat through cold storage walls, but it has been proved that some forms of construction retard its progress more than others. A perfect vacuum would be the ideal insulator and this being unattainable in practice, the next best thing is sought, namely, still air, or "dead air spaces." Free air is never still, but moves as its density is changed either by a loss or gain in heat, or in moisture, or a loss or gain in both. In order to secure motionless air, it must be so confined as to prevent its circulation. To do this it should be divided into the smallest possible particles and stored in minute enclosing cells.

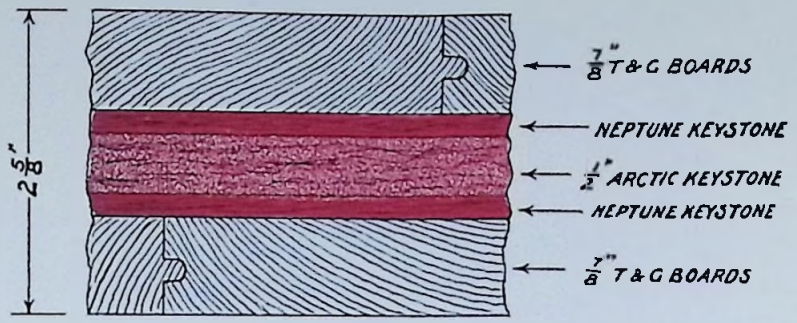
H. W. Johns-Manville Co.: Building Material... Published by AsbestosClaims.Law
ACL Doc 21283 · Page 41 of 54 asbestosclaims.law/library/21283/41

To determine the relative insulating value of various materials, Professor Goss, Dean of the Engineering Faculty at Purdue University, was selected as being a recognized authority, to conduct some practical tests of various materials suited for cold storage insulation purposes. The selection of Purdue University was most happy as it is the official authority of the Associated Railway Master Mechanics of the United States, who represent the largest individual interests in this country, if not in the world.

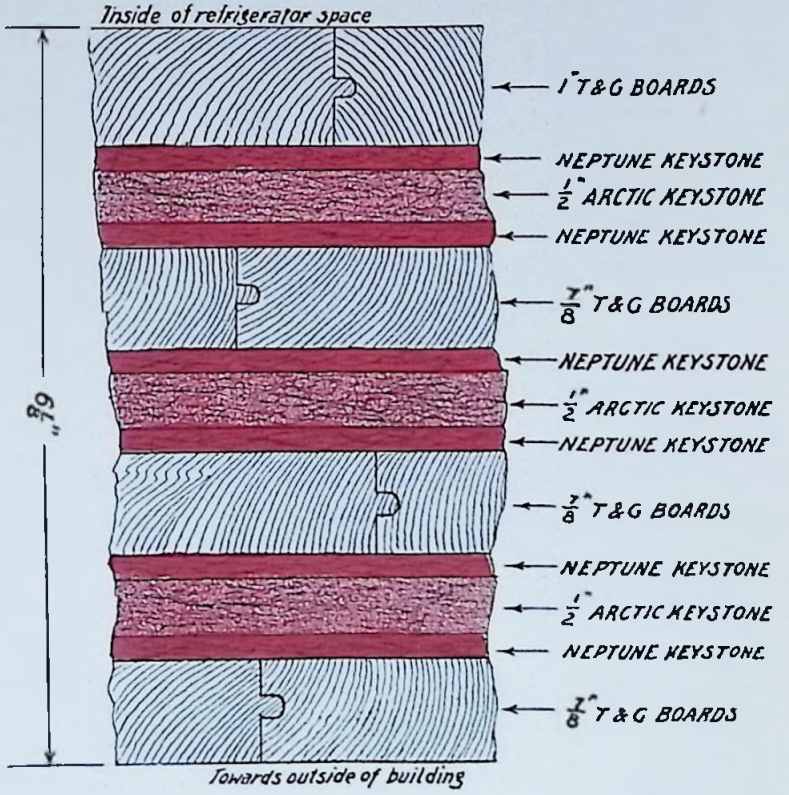


COMBINATION NO. 1

Among the various insulating materials that were tested under Professor Goss' supervision were Linofelt, Hair Felt and Keystone Hair Insulator in various combinations. These constructions of Keystone Hair Insulating materials were designated as "Combination



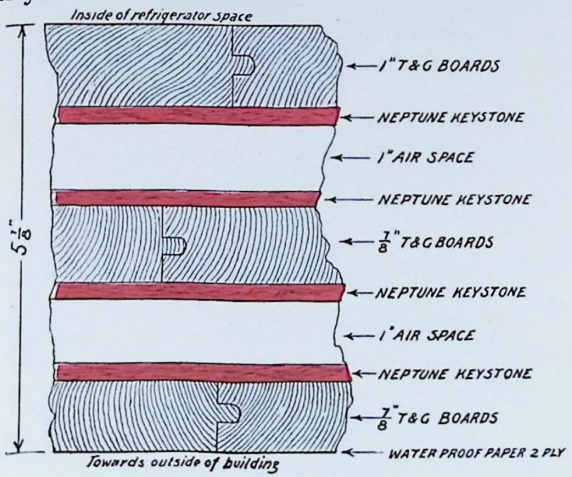
COMBINATION NO. 2



COMBINATION NO. 3

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 42 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/42

No. 1," "Combination No. 2," "Combination No. 3," and "Combination No. 4." For detailed cuts, see pages 65, 66 and 67. We will not attempt to enter into a description of the methods employed, except to say that they were practical and scientific, resulting from Professor Goss' years of experience and personal knowledge of this important question. From the results obtained, as shown by tables 15, 16, 17 and 18, it is apparent that the insulator filled with loose unfelted hair stood supreme among the materials tested in resistance to heat transmission. This being clearly demonstrated, it was decided to test it further in combination with boards as it is commercially used for cold storage walls and thus secure data for wall values on a practical basis. The results of these special tests confirm other tests as to the superiority of Keystone Hair Insulator.



COMBINATION NO. 4

FOR COLD STORAGE PURPOSES, WE RECOMMEND:—

Arctic Brand: Has heavy waterproof paper on both sides. This Brand is especially recommended for insulation and refrigerator cars and stationary refrigerator work owing to its remarkably high insulating efficiency. Arctic Brand has been adopted by many of the largest railroad interests in the country as the standard form of refrigerator car insulation.

Neptune Brand: Waterproof paper on one side and plain rosin-sized paper on the other. For use where protection against dampness is desired.

Double Neptune Brand: Waterproof paper on both sides for weather-proofing against excessive dampness.

Phoenix Brand: Fire-and damp-proof Asbestos paper one side, and plain rosin-sized paper, the other.

Salamander Brand: Fire-and damp-proof Astos paper on both sides for fire protection, in addition to insulation of heat and cold and sound deadening.

In Phoenix and Salamander Brands of Keystone we have a practically fire-proof insulation of great value in fireproof construction.

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 43 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/43

TABLE X. WALL COMBINATION NO. 1

OBSERVED RESULTS

Date	Hour Ending	Average Temperature on Inside of Panel.	Average Temperature on Outside of Panel.	Weight of Ice Melted per Hour. Pounds.	Remarks
I	II	III	IV	V	
Dec. 10	10:15	47.9	91.5	1.47	Ice Chamber filled 6:45 a. m.
"	11:15	47.9	94.0	1.34	
"	12:15	47.9	92.0	1.45	
"	1:15	47.9	92.0	1.41	
"	2:15	47.9	92.0	1.42	
"	3:15	47.9	91.5	1.38	
"	4:15	47.9	91.5	1.36	
Dec. 12	10:15	47.9	90.5	1.25	Ice Chamber refilled 2:00 p. m., Dec. 11 and 6:30 a. m. Dec. 12.
"	11:15	47.9	90.8	1.25	
"	12:15	47.9	91.8	1.28	
"	1:15	47.9	91.5	1.28	
"	2:15	47.9	91.0	1.28	
"	3:15	47.9	91.0	1.28	Test Observations.
"	4:15	47.9	91.2	1.28	
Total		335.3	637.8	8.90	
Average		47.9	91.1	1.27	

TABLE XI. WALL COMBINATION NO. 2

OBSERVED RESULTS

Date	Hour Ending	Average Temperature on Inside of Panel.	Average Temperature on Outside of Panel.	Weight of Ice Melted per Hour. Pounds.	Remarks
I	II	III	IV	V	
Dec. 19	10:30	42.3	92.5	.91	Ice Chamber filled 9:00 a. m., Dec. 18 and refilled 7:30 a. m., Dec. 19.
"	11:30	42.3	93.0	.87	
"	12:30	42.3	52.5	.87	
"	1:30	42.3	91.5	.91	
"	2:30	42.3	91.0	.97	
"	3:30	42.3	90.5	.97	
"	4:30	42.3	90.5	.97	
Dec. 20	10:15	42.3	91.0	1.03	Ice Chamber refilled 6:30 a. m.
"	11:15	42.3	91.0	1.00	
"	12:15	42.3	92.5	1.03	
"	1:15	42.3	93.0	1.03	
"	2:15	42.3	92.5	1.03	
"	3:15	42.3	92.5	1.03	Test Observations.
"	4:15	42.3	91.0	1.03	
Total		296.1	643.5	7.18	
Average		42.3	91.9	1.03	

Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/44

TABLE XII. WALL COMBINATION NO. 3

OBSERVED RESULTS

Date	Hour Ending	Average Temperature on Inside of Panel.	Average Temperature on Outside of Panel.	Weight of Ice Melted per Hour. Pounds.	Remarks
I	II	III	IV	V	
Mar. 1	11:00	38.8	90.8	1.43	Ice Chamber filled 8:00 a. m.
"	12:00	38.8	90.5	1.31	
"	1:00	38.8	90.5	1.12	
"	2:00	38.8	91.5	1.06	
"	3:00	38.8	91.5	1.00	
"	4:00	38.8	91.4	.97	
"	5:00	38.8	91.0	.86	
Mar. 2	11:00	38.8	92.0	.81	Ice Chamber refilled 8:00 a. m.
"	12:00	38.8	93.9	.84	
"	1:00	38.8	93.0	.84	
"	2:00	38.8	92.0	.84	
"	3:00	38.8	91.5	.84	
"	4:00	38.8	91.5	.84	
"	5:00	38.8	91.8	.84	Test Observations.
Total		27.16	645.7	5.82	
Average		38.8	92.2	.83	

TABLE XIII. WALL COMBINATION NO. 4

OBSERVED RESULTS

Date	Hour Ending	Average Temperature on Inside of Panel.	Average Temperature on Outside of Panel.	Weight of Ice Melted per Hour. Pounds.	Remarks
I	II	III	IV	V	
Jan. 5	10:30	39.7	90.4	1.03	Ice Chamber filled 9:00 a. m., Jan. 4 and refilled 7:45 a. m., Jan. 5.
"	11:30	39.7	90.6	1.06	
"	12:30	39.7	91.0	1.00	
"	1:30	39.7	91.5	1.00	
"	2:30	39.7	91.2	1.03	
"	3:30	39.7	91.5	1.06	
"	4:30	39.7	91.2	1.06	
Jan. 6	10:30	39.7	90.9	1.09	Ice Chamber refilled 8:00 a. m.
"	11:30	39.7	91.1	1.09	
"	12:30	39.7	91.5	1.12	
"	1:30	39.7	91.5	1.12	
"	2:30	39.7	91.2	1.12	
"	3:30	39.7	91.0	1.12	
"	4:30	39.7	91.0	1.09	Test Observations.
Total		277.9	638.2	7.75	
Average		39.7	91.2	1.107	

Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/45

TABLE XV. SUMMARY

OBSERVED RESULTS

Insulating Material	Average Temperature Outside of Panel.	Average Temperature Inside of Panel.	Total Weight of Ice Melted during 7 Hours. Pounds
	I	II	III
Arctic Keystone, one layer..	89.6	49.0	11.61
Arctic Keystone, two layers.	89.3	47.3	10.05
Flax Fibre Felt, one layer..	90.9	49.3	x 15.98
Linofelt, two layers.....	89.1	48.8	11.44
1-2 inch Hair Felt, one layer	89.5	51.3	22.42
1-2 inch Hair Felt, between two layers of paper...	89.3	49.5	13.34
Wall Combination No. 1...	91.1	47.9	8.90
Wall Combination No. 2...	91.9	42.3	7.18
Wall Combination No. 3...	92.2	38.8	5.82
Wall Combination No. 4...	91.2	39.7	7.75
Wall Combination No. 5...	90.7	43.8	8.84

x Eight hour test.

TABLE XVI.

ICE MELTED PER TWENTY-FOUR HOURS

Insulating Material	Difference of Temperature between Inside and Outside of Calorimeter.	Average Weight of Ice Melted per Hour. Pounds.	Equivalent Weight of Ice Melted per 100 Square Feet of Radiating Surface, per 24 Hours, under the Conditions of the Test, Pounds.	Equivalent Weight of Ice Melted per 100 Square Feet of Radiating Surface, per Degree Difference of Temperature per 24 Hours Pounds.
	I	II	III	IV
Arctic Keystone, one layer.	40.6	1.576	156.82	3.862
Arctic Keystone, two layers	42.0	1.349	134.29	3.196
Linofelt, one layer.....	41.6	1.912	190.25	4.572
Linofelt, two layers.....	40.3	1.551	154.33	3.829
1-2 inch Hair Felt, one layer	38.2	3.125	310.94	8.140
1-2 inch Hair Felt, between two layers of paper...	39.8	1.814	180.50	4.535
Wall Combination No. 1...	43.2	1.183	117.71	2.727
Wall Combination No. 2...	59.5	.925	92.04	1.859
Wall Combination No. 3...	53.4	.722	71.84	1.345
Wall Combination No. 4...	51.5	1.002	99.70	1.936
Wall Combination No. 5...	46.9	1.167	116.09	2.475

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 46 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/46

TABLE XVII. HEAT TRANSMISSION

Insulating Material	Heat (B. T. U.) Transmitted for each pound of Ice Melted.	Total Heat (B. T. U.) Transmitted per Hour 24.12 square feet of Radiating Surface.	Equivalent Heat (B. T. U.) Transmitted per square foot of Radiating Surface. Per Difference of Temperature per Hour.	Per cent. of increase in heat transmission compared with that of one layer of Arctic Keystone (Increase +, Decrease —)
	I	II	III	IV
Arctic Keystone, one layer.	144	226.94	.2317	
Arctic Keystone, two layers	144	194.26	.1918	—14.4
Linofelt, one layer.....	144	275 33	.2743	+21.3
Linofelt, two layers.....	144	223.34	.2297	— 0.2
1-2 inch Hair Felt, one layer	144	450.00	.4884	+98.7
1-2 inch Hair Felt, between 2 layers of paper.....	144	361.22	.2721	+59.1
Wall Combination No. 1...	144	170.35	.1635	—24.9
Wall Combination No. 2...	144	133.20	.1116	—41.3
Wall Combination No. 3...	144	103.97	.0807	—54.2
Wall Combination No. 4...	144	144.29	.1162	—36.4
Wall Combination No. 5...	144	168.05	.1485	—25.9

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909) Published by AsbestosClaims.Law
ACL Doc 21283 · Page 47 of 54 asbestosclaims.law/library/21283/47

TABLE XVIII. RELATIVE VALUES

RELATIVE INSULATING VALUES, THE BASIS OF COMPARISON BEING UNITY

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII
Arctic Keystone, two layers	1.000	1.198	1.208	1.319	1.419	1.430	1.970	2.546	.421	.582	.606	.774	.852
Linofelt, two layers	8.35	1.000	1.009	1.101	1.185	1.194	1.645	2.126	.351	.488	.506	.647	.712
Arctic Keystone, one layer	8.28	.991	1.000	1.092	1.174	1.183	1.631	2.108	.348	.482	.501	.641	.706
½ inch Hair Felt, between two layers of paper	.705	.844	.832	.930	1.000	1.008	1.388	1.795	.297	.410	.427	.546	.601
Linofelt, one layer	.699	.837	.845	.922	.992	1.000	1.377	1.781	.294	.407	.424	.541	.596
½ inch Hair Felt, one layer	.393	.470	.474	.518	.557	.562	.774	1.000	.165	.229	.238	.304	.334
Wall Combination No. 3	2.377	2.846	2.871	3.135	3.372	3.399	4.682	6.052	1.000	1.383	1.440	1.841	2.026
Wall Combination No. 2	1.719	2.058	2.076	2.267	2.435	2.458	3.386	4.377	.723	1.000	1.041	1.331	1.465
Wall Combination No. 4	1.651	1.977	1.995	2.177	2.342	2.361	3.251	4.204	.695	.961	1.000	1.278	1.407
Wall Combination No. 5	1.291	1.547	1.560	1.704	1.832	1.847	2.544	3.289	.543	.752	.783	1.000	1.101
Wall Combination No. 1	1.173	1.405	1.417	1.547	1.664	1.678	2.311	2.987	.494	.683	.711	.983	1.000

Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/48

SECTION 7



J-M BUILDING FELTS AND SPECIALTIES

Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/49

J-M ASBESTOS SHEET MILL BOARD

FIRE- AND ACID-PROOF



Especially adapted for fire-proof lining of floors, partitions, etc. Also for packings, fire screens, lining for ranges, stoves, grates, gas backs, etc. Made from pure Asbestos Fibre and is fire- and acid-proof.

Standard sheets 40 in. x 40 in. or 42 in. x 44 in.

APPROXIMATE WEIGHTS AND THICKNESSES

$\frac{1}{32}$ //	— 2	lbs.	per	sheet	$\frac{3}{16}$ //	— 12	lbs.	per	sheet
$\frac{3}{64}$ //	— 3	"	"	"	$\frac{1}{4}$ //	— 14	"	"	"
$\frac{1}{16}$ //	— 4	"	"	"	$\frac{3}{8}$ //	— 23	"	"	"
$\frac{3}{32}$ //	— 6	"	"	"	$\frac{1}{2}$ //	— 27	"	"	"
$\frac{1}{8}$ //	— 8	"	"	"					

Made in three grades; hard, medium and soft.
Medium furnished unless otherwise specified.

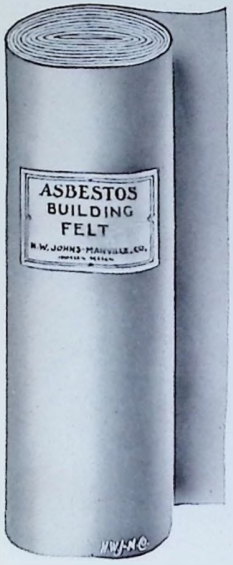
PRICES

Standard sizes and thicknesses.....List 10c. per lb.

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1...
ACL Doc 21283 · Page 50 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/50

J-M NON-BURN ASBESTOS FELT AND ROLL BOARD

This is a fire-proof material especially adapted for fire-proof construction because of its high heat-resisting qualities. Used for lining side-walls, floors, ceilings, wood partitions, etc. Will not disintegrate, is odorless and vermin proof. Put up in rolls, 36 inches wide, weighing approximately 100 pounds each.



APPROXIMATE WEIGHTS AND THICKNESSES

6	lbs.	per	100	square	feet	($1\frac{1}{2}$–100″)
10	"	"	"	"	"	($2\frac{1}{2}$–100″)
14	"	"	"	"	"	($\frac{1}{32}$″)
30	"	"	"	"	"	($\frac{1}{16}$″)
45	"	"	"	"	"	($\frac{3}{32}$″)
56	"	"	"	"	"	($\frac{1}{8}$″)

PRICES

Non-burn Asbestos Building Felt, 6 lbs. to 30 lbs., List 6c. per lb.
Non-burn Asbestos Roll Mill Board, $\frac{3}{32}$ in. and $\frac{1}{8}$ in. thick, List 8c. per lb.

J-M ROSIN-SIZED SHEATHING



J-M Rosin-Sized Sheathing is used for lining floors and walls, and as a weather protection. Is soft, flexible and easily applied. It adapts itself to all conditions where any sheathing paper can be used.

Prices on application.

J-M WOOL FELT PAPER

J-M Wool Felt is an excellent material for lining under parquet floors. It is the best lining paper on the market, giving far better results than ordinary sheathing paper. We manufacture a complete line of Wool Felt papers for all purposes put up in standard size rolls 36 inches wide.

In the following weights per square yard:—½, ¾, 1, 1¼, 1½ and 2 lbs.

Prices on application.

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 51 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/51

J-M BLUE PLASTER BOARD

This is a felt board about 3-64 inch thick and is adapted to the ceiling of cheap or temporary constructions where the cost of lath and plaster would be too high. This is readily nailed to the studs and forms an effective barrier to heat and cold. It is also an ideal lining under clapboards and is used in large quantities as a lining for chicken houses and inexpensive farm structures. We furnish this board in 36-inch wide rolls, each containing 500 square feet and weighing 60 pounds. List price on application.

J-M STANDARD HAIR FELT



Made from selected cattle hair by an improved felting process. Extensively used for insulating hot and cold water pipes and other surfaces. Cattle hair is largely used for lining refrigerators, refrigerator cars, ice houses, etc.

HAIR FELT is put up in bales containing 300 square feet each. Bales 6 feet wide will be shipped unless otherwise specified. A 3 ft. width will be furnished without extra charge. Also furnished in special widths and cut special sizes to order.

PRICE LIST

¼ in. thick	$ .04	sq. ft.	1 in. thick	$ .06½	sq. ft.
½ in. thick	.04¾	sq. ft.	1½ in. thick	.10	sq. ft.
¾ in. thick	.05¾	sq. ft.	2 in. thick	.13	sq. ft.

J-M ASBESTOS SLATERS FELTS

WEATHER-PROOF, WATERPROOF, ACID-PROOF AND ODORLESS

These Felts are intended for use over roof and weather boards as linings for Transite Asbestos, Shingles and other roofs, for which they have no equal.

They are composed of pure Asbestos Felt, saturated with our Water and Acid-Proof Composition, both purely mineral. Owing to the total absence of vegetable, animal or organic matter, they will remain permanently unchanged. They are odorless, damp, acid, weather, rust and vermin-proof, and will not decay.

J-M Asbestos Slaters Felts are supplied in rolls 36 ins. wide. This material can be put up in one to five square rolls.

	List Price
J-M No. 1 Slaters Felt.....108 sq. ft. to a roll	$1.20
J-M Double Thick Slaters Felts.....108 sq. ft. to a roll	2.40

Discounts on application.

J-M MINERAL WOOL

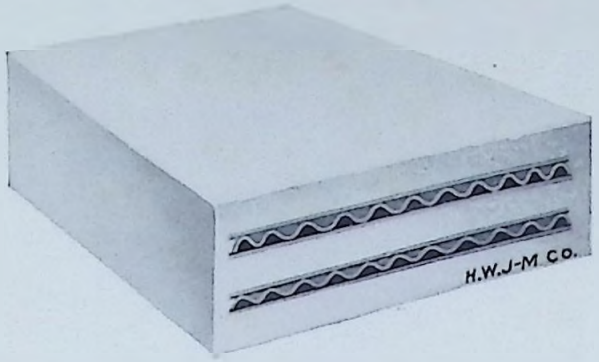
Perhaps the most prominent use to which MINERAL WOOL is put is the insulation of halls, theatres, residences, etc., for the purpose of deadening sound and for heat and cold insulating.

In estimating the quantity required, J-M MINERAL WOOL will weigh from ten to twelve pounds to the cubic foot. J-M MINERAL WOOL is shipped in sacks, weighing sixty pounds each.

H. W. Johns-Manville Co.: Building Materials, Catalogue No. 102 (1909)
ACL Doc 21283 · Page 52 of 54
Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/52

HOWE INSULATING BLOCKS

Patented.



This insulation is made in the form of sheets or blocks. As will be seen by the illustration, the 2-inch Blocks consist of two layers of corrugated paper (containing the dead air cells), embedded in a plastic insulating compound.

The formation of alternate layers of fibre with the dead air cells, and the plastic material gives the whole mass great toughness, making a strong, light material.

Exhaustive tests have proved that the HOWE BLOCK shows highest efficiency for all purposes for which insulating sheets and blocks are used. It is an extremely useful and economical Block for boiler room ceilings, boiler coverings and for heavy ducts and smoke pipes. It is easily sawed to fit irregular places.

The Blocks can be furnished in special sizes and thicknesses either by modifying the amount of dead air cells or by simply increasing or decreasing the size of the plastic layers. We furnish these Blocks in sizes 3 in. by 18 in.; 6 in. by 36 in.; 24 in. by 36 in.

Thicknesses as follows:

1 in.	$ .30	2 in.	$ .60	3½ in.	$1.05
1½ in.	.45	2½ in.	.75	4 in.	1.20
		3 in.	.90		

A FEW J-M PRODUCTS

NON-CONDUCTING COVERING
Ask for Catalog No. 100

Asbestos-Sponge Felted Covering and Sheets
Asbestos Fire-Felt Covering, Sheets and Blocks
J-M 85% Magnesia Covering
Magnesia Cement and Blocks
Asbestos Moulded Covering and Blocks
Asbestos Air-Cell Covering and Sheets
Asbestocel Covering and Sheets
J-M Sectional Conduit
Vitribestos Materials

STEAM PACKINGS, ETC.
Ask for Catalog No. 111

Coil, Spiral and Ring Packing
Kearsarge Packing, Sheet, Gaskets and Rings
Triplex Sheet Packing
Asbestos Wick and Rope Packing
Asbestos Gaskets
Asbestos and Rubber Rings and Gaskets
Vulcabeston Packing
Permanite Sheet Packing and Gaskets
Morris Metallic Packing

ROOFING MATERIALS
Ask for Catalog No. 303

J-M Asbestos Roofing
Asbestoside
Regal Roofing and Roof Coating

BUILDING MATERIALS
Ask for Catalog No. 102

Keystone Hair Insulator
Transite Asbestos Wood
Transite Asbestos Shingles
Cold Storage Insulation
Asbestos Sheathing
Asbestic Wall Plaster
J-M Asbestos Stucco
Sanitor Closet Seats and Tanks

COLD STORAGE INSULATION
Ask for Catalog No. 104

Pure Cork Sheets
Indurated Fibre Boards
Impregnated Cork Boards
Keystone Hair Insulator
Rock Wool Blocks
Granulated Cork

FIRE-PROOF CEMENTS, ETC.

Asbestos Furnace Cement
Asbestos Plastic Stove Lining
Phœnix Asbestos Dry Stove Lining
Arido Dry Furnace Cement
Asbestos Retort Cement

ASBESTOS FABRICS AND SPECIALTIES

Asbestos Cloth—all styles
Asbestos Theatre Curtains
Asbestos Fire-Proof Rope
Asbestos Cord
Asbestos Twine
Asbestos Gloves and Mittens

ASBESTOS HOUSEHOLD ARTICLES
Ask for Catalog No. 105

Asbestos Table Covers, Mats, etc.
Asbestos Cooking Utensils
Asbestos Document Boxes

ELECTRICAL SUPPLIES

Linolite System of Electric Lighting
"Noark" Enclosed Fuse Devices
J-M Overhead Line Material
J-M Electric Heaters
J-M Friction Tape
Electrical Insulating Sheets
The Electrotherm—An Electric Heating Pad

J-M SPECIALTIES

Magic Boiler Preservative
Manville Dry Chemical Fire Extinguisher
Success Liquid Fire Extinguisher
Leak-No Metallic Compound
Ferro Compound
H-O Pipe Joint Cement

H. W. JOHNS-MANVILLE CO.

Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/53



Published by AsbestosClaims.Law
asbestosclaims.law/library/21283/54