

How to give Your Barn Sturdy Sidewalls!



RUBEROID T/NA 100 MULTI-PURPOSE INSULATION JACKETING

a new and simplified solution to insulation jacketing problems



This new and revolutionary material represents a major breakthrough in the field of insulation jacketing. T/NA 100 is the first and only flexible, extruded insulation that provides superior resistance to chemical, physical, and weathering conditions. Its unique flexibility and portability requires application in process and offers a significant saving in installation costs.

Ruberoïd T/NA 100 combines asbestos felt, an inorganic material of established durability and flame resistance with "Teflon", a new polytetrafluoroethylene of unique characteristics that has recently been developed by Du Pont.

FEATURES:

- FLEXIBLE** over wide temperature range, from minus 50°F to over 200°F.
- FLAME-RESISTANT** - The combination of Ruberoïd "Asbestos felt and DuPont's "Teflon" gives T/NA 100 a superior fire-resistant rating.
- DESIGNED FOR MULTIPURPOSE USE** - The versatility of T/NA 100 makes it an effective air-stopping, large bulk, water seal, and protecting jacket.
- RESISTANT TO PUNCTURE AND ABRASION** because of tough "Teflon" surface.
- BRIGHT WHITE SURFACE** is attractive, highly reflective.

SPECIFICATIONS:

Width of Roll	36 in.
Length	100 ft.
Area (Gross)	3600 sq. ft.
Approx. Shipping Weight	600 lbs.

CHEMICAL AND SOLVENT RESISTANT even when boiled in strong acids and bases. Undisturbed at ordinary temperatures by many classes of common solvents, including hydrocarbons and chlorinated solvents, in-organic acids, alkalis, and other corrosive liquids. Its strength and resistance to soil bacteria.

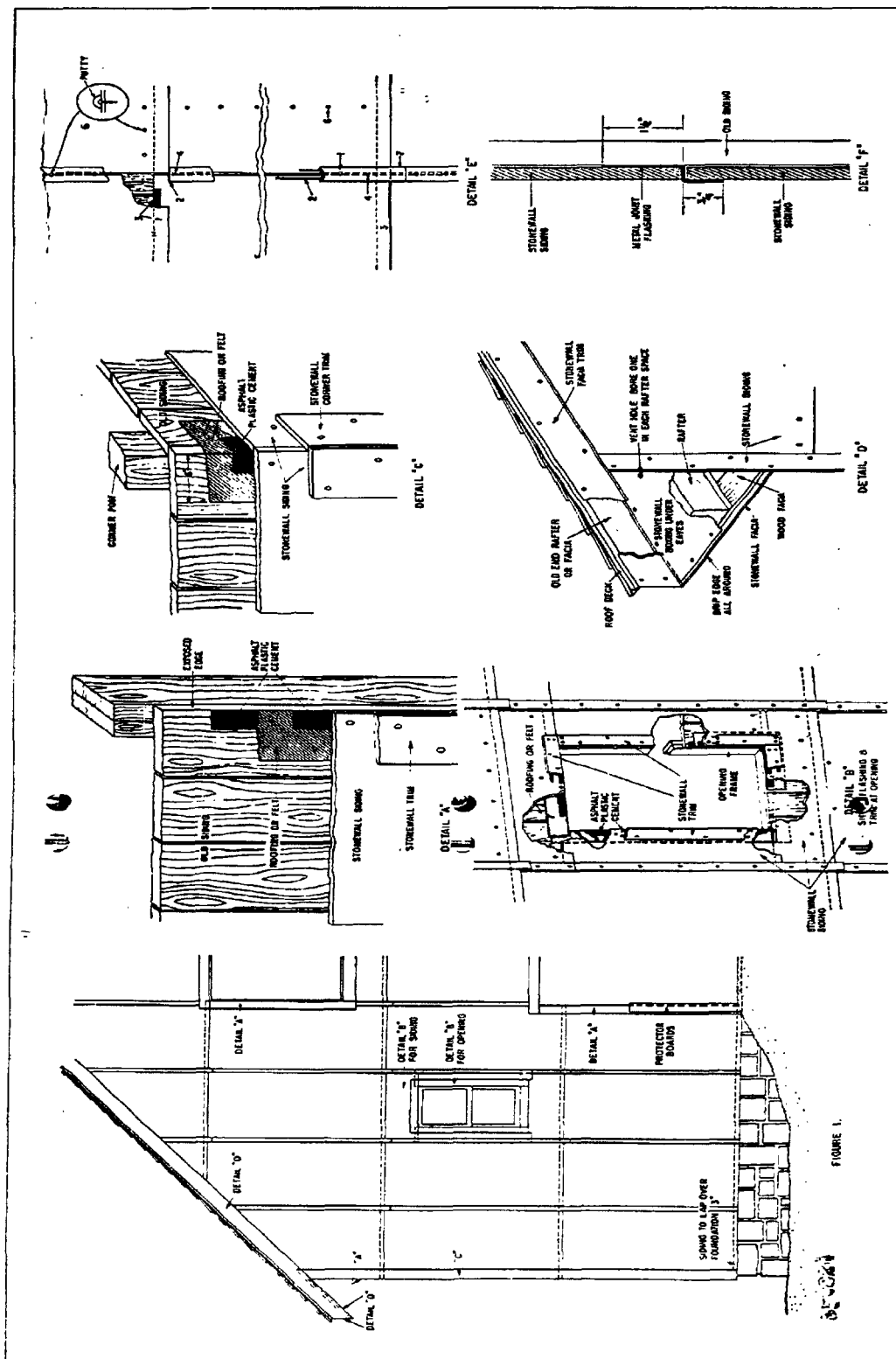
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OTHER RUBEROID THERMAL INSULATIONS

HIGH TEMPERATURE	INSULATION CEMENT
Calcite	Grade 118 Asbestos Cement
MEDIUM TEMPERATURE	Grade 214 Asbestos Cement
Fiber Glass Pipe Insulation	Grade 412 Single Coat Cement
Fiber Glass Insulation - F-ene Fibered	Cellulose Cement
Special Fiber Insulation	Grade 313 Mineral Wool Cement

The RUBEROID Co. INDUSTRIAL PRODUCTS DIVISION • 733 Third Avenue, New York, N. Y. 10017

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STONEWALL BOARD is the better sliding and insulator is because it cannot rust, rot or disintegrate, and never needs painting or oil and varnish-proof, easy to clean, is easy to work and apply, and it comes in a variety of sizes. It is available in 3/8 in. thick in large 3 ft.-0 in. x 4 ft. 0 in. standard size sheets or in 1/2 in. thick in 2 ft. 0 in. x 3 ft. 0 in. standard size sheets. Some of the barn sliding fans are made of the same material. The framework of the barn subbody is usually made of a piece of 2 in. x 4 in. lumber.

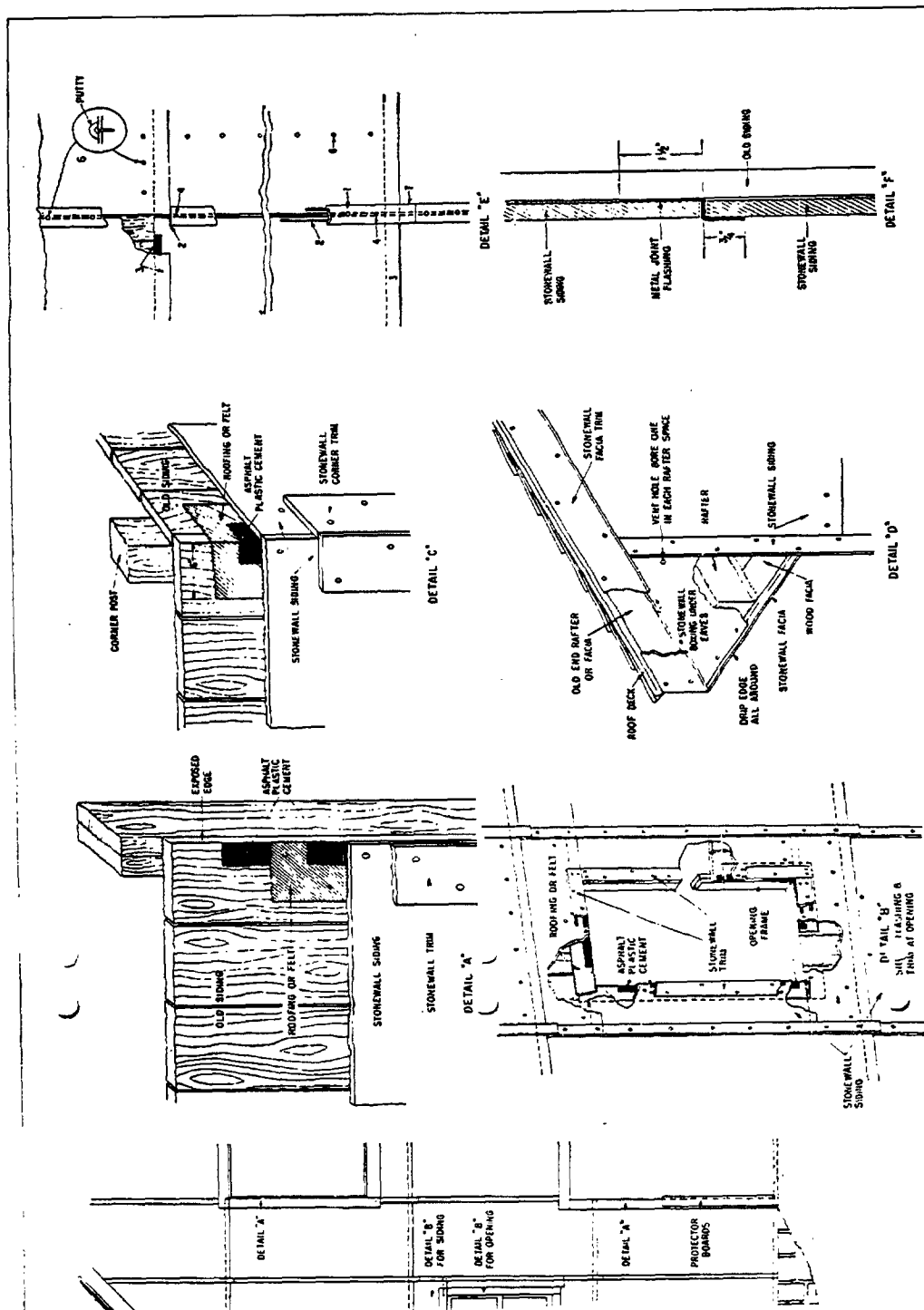
Preparing the

When the Stowall is delivered and level on a temporary platform floor and protect it from the weather. Care to keep all four sides even.

When you rebuild your barn, you may be able to use the old exterior repair job. Therefore, you should take that:

1. The foundations are in *ex.*
strong and level.
2. The framework of the bay
square unit that all work, *rot*
have been replaced or repaired.
3. Proper and sufficient *win*
installed inside the framework to
shape.
4. The existing siding has *be*
with new nails where necessary
strong and reasonably smooth
wall Siding.
5. All trim around doors, *wi*
been removed.
6. That the barn is *proper*
tilated.

If the existing siding is attached over the joints, remove these horizontal "German" siding. New siding must likely no differ or further with existing siding in as far as the rough construction. It may be necessary to level up the surface. Only if it is necessary to apply 1/2 inch strips on 24 in. centers, over the siding should be applied over a batten, or until three nails are in smooth and level surface is provided.



Corners—Openings and Eaves

Because Stenoal is never level, painting or any other treatment to protect it from the weather, all exposed woodwork, such as eaves and opening trim should either be replaced with, or be boxed in with, Stenoal. This eliminates all future painting expense. (See Fig. 1—Details A, B, C & D.) When eaves are boxed in, leave one vent hole about 1/8 in. in diameter through the Stenoal siding, in each space between rafters. (See Detail "F".)

Door and window trim and the corner finishing can be ordered with Stenoal, or Stenoal can be applied to the trim and the trim can be painted. The sides of all openings and outside corners that may be damaged by weathering or animals, may be protected by leaving in a continuous butt-joint of Rubberoid Plastic (see detail "F") around all 1/4 in. thick and over 2 in. wide applied out to the exposed edge of all flashing strips. (See Details J, K & L.)

Before applying the Stenoal all openings should be finished with Rubberoid Plastic, Double-Kraft, or Saturated Shredded Paper. A flashing strip, 1/4 in. wide around openings, and 1/2 in. wide around all corners is recommended. All Stenoal sheets should be latched in a continuous butt-joint of Rubberoid Plastic (see detail "F") around all 1/4 in. thick and over 2 in. wide applied out to the exposed edge of all flashing strips. (See Details J, K & L.)

All Stenoal opening and corner trim or strips should be applied over the Stenoal siding. The siding should be run up to the edge of all openings and corners. Apply the siding first, then apply the trim. (See Details "F" & "H".)

Application of Stenoal Siding

Much effort can be saved by growth and carefully planning the layout of the Stenoal siding, before starting the job. When applied over old wood, sheathing or siding, it takes no difference whether the Stenoal sheets are applied with their long dimension horizontal or vertical. Also in such cases it is not necessary to hatch or stagger the vertical joints between sheets.

If it is necessary to use same sheet, shorter than standard length, the job growths back, better if the short sheets are applied in the top corner, under the eaves.

The best practice is to make a simple outline sketch of each side of the house. Lay out each sheet of Stenoal in its proper place on this sketch. This will make sure that you order the correct number of Stenoal sheets, battens and corner and trim strips. Remember the sheets come standard 2 ft. x 10 ft. and the battens are 1 in. thick x 2 in. wide. Lay out the sheets on the sketch, then lay out the battens. Lay out the sheets on the sketch, then lay out the battens. Lay out the sheets on the sketch, then lay out the battens.

It is recommended that 1/4 in. thick Stenoal sheets, battens and trim be used for barn siding, although, if in thick Stenoal frequently has been used with satisfactory results. Horizontal joints should be made by latching the upper sheets over the lower sheets at least two inches in the upper corner of the lower sheet. The top of the lower sheet (see Detail "F") Horizontal joints may be latched if a 7/8" shaped noncorroding and non-staining metal flashing strip

is used in the joint. (See Detail "F"). The upper leg of the metal flashing is placed under the upper sheet and the lower leg is placed over the outside of the lower sheet.

There are two satisfactory methods of applying Stenoal sheets to barns as siding, two is to apply the top corner sheets first. When you use this method it is necessary to delay driving nails at the lower end of the sheets until the sheets of the next lower course are laid up and under the upper corner sheets. To make the 2 in. horizontal lap, under the upper corner sheets, is made the 2 in. horizontal lap, under the upper corner sheets. To make the 2 in. horizontal lap, under the upper corner sheets, is made the 2 in. horizontal lap, under the upper corner sheets.

The other method is to apply lower corner sheets first, thus allowing the application of suitable plastic cement, at the upper end of the lower sheet before applying the sheets in the next higher course. Obviously this method requires the use of a more formal scaffold that must be raised as the work progresses, and prevents the use of wall brackets.

In order to provide proper and uniform spacing at the vertical joints between the Stenoal sheets, three or four 1/4 in. common nails can be used as a gauge. After the first sheet in any course has been laid in place, place, but not square, partially drive a 3/4 in. nail right in the joint, but not through the vertical edges of the sheet. (See Detail "F", "J", "K" & "L".) These nails are the joint spacing gauges. Set the next sheet to be erected, tight up against three nails, check the placing of the sheet with a level to be sure it is plumb, nail it in place, and then pull out the spacer nails.

Vertical joints between Stenoal sheets should be covered with battens strips 2 in. wide. Battens strips must be 2 in. longer than the sheet, for top corner sheets, and the same length as the sheet for the intermediate sheets, and 2 in. shorter than the sheet for the bottom corner sheets. This allows for latching the sheets one over the other. (See Fig. 1 and Details "B" & "F", "J", "K" & "L".)

Drive nails through the center of the battens only, and so that the nails enter the joint between the sheets under the battens. Do not drive nails through the sheets under the battens. (See Detail "F", "J", "K" & "L".) This allows for expansion and contraction and movement in the building. The horizontal lap, having no nails through them, also allows contraction. Set all battens in place of Rubberoid Plastic (see detail "F") in the joint point between the sheets. It is easier to apply the plastic cement with a caulking gun. (See Detail "F", "J", "K" & "L".)

To do a good job and keep the sheets plumb and level, two guide lines are necessary. This can be done by means of chalk lines. Nails a vertical chalk line from top to bottom at the corner of each side of each wall. This line must be plumb. Also nail level horizontal chalk lines to locate the bottom line of each course of sheets. When applying the sheets from the top down and in order to provide a supporting for the sheets, they are being erected, temporarily nail a line of 1 x 1 boards just under the horizontal chalk line. (See the Stenoal sheets on these 1 x 1's, until they are nailed in place, then remove the 1 x 1's and apply the next lower course.

Nails and Nailing

Neither weather, rot, warping, rust nor corrosion can harm Stenoal, but in time, most nails rust and do rust or corrode. Therefore when doing permanent construction, such as installing barns, it is cheap to use the best non-corroding nails that money can buy—regardless of cost. Hardened or tempered steel nails are much easier to drive through oak and other hard woods, and Stenoal too, because Stenoal is just about as hard as white oak. Nails should be installed by either hot galvanized or electroplated steel or by plating with copper or brass.

An oil hardened or tempered, non-corroding, screw should nail with a needle point and a reasonably large flat head should be used with trim or corner strips. On nail edges of sheets under properly secured battens, when joints are not covered with battens, sheets should be nailed along edges. (See Detail "F", No. 3.) That remember, battens always provide the best job.

Exposed nails in batten strips, and in the face of the sheets between vertical joints, should have flat heads, and otherwise be the same as above. If lead-headed nails are not available, completely bury the heads of all exposed nails with a mound of Rubberoid Plastic (see detail "F"), or the best grade of caulking compound available. (See Detail "F", No. 6.)

Do not use a nail with two sharp points or one that is too large in diameter. For common or soft steel nails, 11 gauge is about the longest recommended. Hardened nails may be as thin as 12 or 13 gauge. Flat heads should be about 5/16 in. or 3/8 in. in diameter. The heads of lead-headed nails are all about the same size.

The nails you use have the job of holding the new Stenoal siding in place for a very long time. Therefore you should use a nail long enough to reach firm wood. It may be necessary to provide nails of several lengths. Lead headed nails used in the battens, opening trim and corner pieces must be long enough to show for two-thirds the way of the Stenoal strip where one batten overlaps the other. Also allow for three thicknesses of horizontal lap sheets for the different courses of Stenoal. Also 1/4 in. thick battens of Stenoal for nails in the corners. If sheets are being applied over old siding, they may be attached to the old siding with 1/4 in. nails. They do not stick well, and they are hard to keep straight. If you do not have time to do this, use 1/4 in. nails to attach the battens of or become loose if an attempt is made to slide them.

There is no need to use too many nails, 1 or 2 each enough to hold the Stenoal in place, firm and smooth. How many nails you use depends upon how solid the old siding on the barn was. In general, use on 1 in. to 6 in. centers, but back 1/2 in. from the edges of the sheet should be sufficient. Suggest the nails on each side of vertical joints if joints are not covered with battens. Nail in the sheet between vertical joints and above horizontal lap. (See Detail "F", No. 6.) Need not be closer than 1 in. center to center. There will be a sufficient number of nails to hold the sheets in place. Firmly smooth and finish against the Stenoal siding. Drive nails so that the underside of the nail comes up against the Stenoal, but not too tight. Do not drive nails up against the Stenoal. (See Detail "F", No. 6.)

empty, so that the under side of the lead head finishes out through Stenoal to make a water seal. Do not drive nails through Stenoal in any angle—drive them straight.

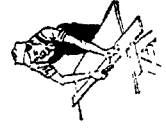
Ventilation

It must be remembered that when a barn is covered with Stenoal lead siding that hundreds of old cracks and air leaks have been sealed up. The barn will generally be much tighter than it ever was before and very much warmer. Therefore, you must be sure that the ridge ventilators or the barn ventilating system is in good working order and that it will move enough air out of the barn to prevent the accumulation of excess moisture inside the barn.

Forces nature and lack of sufficient ventilation inside the barn is frequently indicated by condensation on the inside of the barn or by a damp area appearing on the underside of the old sheathing. Should this happen, just give more ventilation. Remember one cow often releases up to 20 gallons of water in 24 hours in her breath, urine and manure, and that this water must get out of the barn in some way. Proper and sufficient drainage and ventilation are the only ways this water can get out of the barn.

Cutting Stenoal

Stenoal is easy to work and cut. It can be sawed by a 3 in 6 tooth per inch, carpenter's cross cut saw. A sharp saw will because it will cut as fast and then regularly at first and then a long time. The best and quickest way to cut Stenoal is to score it and break it off. (See Fig. 2.) Just lay the sheet of Stenoal on a smooth bench or floor, use a straight board for a straight edge, to be laid along the line to be cut. Then take a strong, sharp pointed sawing tool, a heavy



Score it



Strip it

Fig. 2

in pick, or a sharpened nail set and scratch a deep score on both sides of the sheet along the line of the cut. Then chop the sheet between two 2 x 1's or similar, laid along the score and break off the sheet. Ask your dealer for our folder entitled, "Held Fast to Last with Stenoal Board". This gives detailed instructions for cutting and working Stenoal.

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