PLAINTIFF'S
EXHIBIT
W-318

AIA FILE NO. 19-D

thermo-wall construction

employing **Carey®**

Thermo-Bord and 4.2 Careystone

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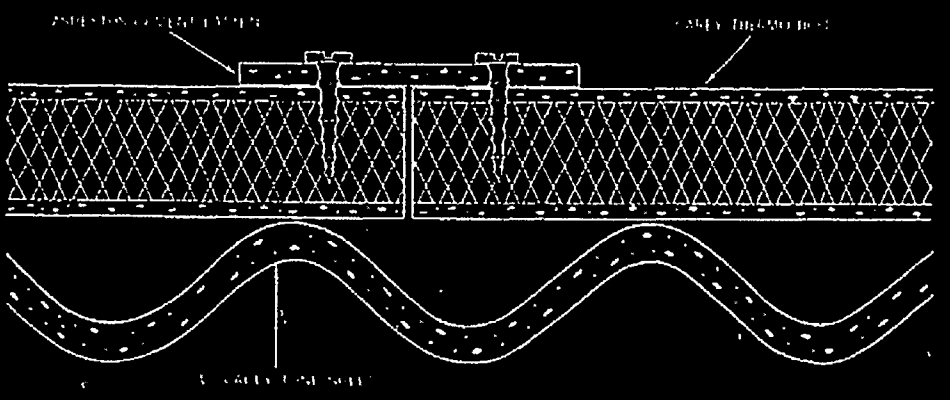

thermo-wall construction

- has high insulating efficiency
- can be used on all types of industrial buildings
- is quickly erected, requires no finishing
- has been proved by more than 20 years of service

THE PHILIP CAREY MFG. COMPANY • LOCKLAND, CINCINNATI 15, OHIO

• Cincinnati, Ohio • Perth Amboy, New Jersey • Houston, Texas • Wilmington, Illinois • Memphis, Tennessee

thermo-wall construction employing Carey Thermo-Bord and 4.2 Careystone

more economical than insulated metal panel construction for all types of buildings

characteristics of thermo-wall construction

Both Carey Thermo-Bord and 4.2 Careystone have all the important construction advantages of asbestos-cement materials—durability, versatility, economy, clean appearance.

When used in combination, as thermo-wall construction, these two asbestos-cement products meet the structural requirements for wall and roof enclosures in most types of industrial and commercial buildings.

But one of the most important features of thermo-wall construction is its *high insulating efficiency;* the growing trend toward air conditioning for industrial buildings makes thermo-wall construction an increasingly useful and economical method of insulating and enclosing in a *single operation* with material supplied from a *single source.*

The co-efficient of Thermal Transmission of thermo-wall construction is as follows:

THERMO-WALL CONSTRUCTION	USING ½" THERMO-BORD	USING 1" THERMO-BORD	USING 1½" THERMO-BORD	USING 2" THERMO-BORD
(A) U=	.26	.20	.15	.13
(B) U=	.30	.22	.16	.14

(A) Based on a mean temperature of 70°F. in BTU per hour, per square foot wall area, per degree temperature difference between inside and outside air, with no wind movement.

(B) Based on a mean temperature of 70°F. in BTU per hour, per square foot wall area, per degree temperature difference between inside and outside air when an *effective* 15 mile per hour air is blowing past outside wall. (We point out the word "effective" since a 15 mile per hour wind actually is somewhat retarded past the surface of a corrugated wall because of the corrugations and thus for an actual wind velocity of 15 miles per hour, the "U" figure would be somewhat less.)

materials specifications for thermo-wall construction

Carey Thermo-Bord is made in standard sheets 4'0" wide, and in standard lengths of 6', 8', 9', 10' and 12'.

4.2 Careystone is made in standard sheets 3'0" wide, and in stock lengths up to 12'0" in multiples of 6".

To avoid waste it is recommended that design details incorporate standard size sheets. However, intermediate sizes can be cut out from stock sheets on the job using carborundum or carbide-tipped blades in hand- or table-saws.

Weight and Thickness Table for thermo-wall construction.

	½" THERMO-BORD	1" THERMO-BORD	1½" THERMO-BORD	2" THERMO-BORD
Overall Thickness at Lap (approx.)	2¼"	3"	3¾"	4"
Wt. per Square Foot (approx.)	7½ lbs.	8 lbs.	8¾ lbs.	9¼ lbs.

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advantages of thermo-wall construction

Many of the advantages of thermo-wall construction are not evident on first examination. But the records of successful installations during the past twenty years show that the investment in thermo-wall construction by well-known companies has been well repaid. Some of the more important reasons for specifying thermo-wall construction include—

high insulating value

thermo-wall construction with 1½" Carey Thermo-Bord has greater insulating value than a 14" common brick wall.

light weight

thermo-wall construction with 1½" Carey Thermo-Bord weighs about 1/20 of the weight of a 14" common brick wall; foundation requirements can be reduced.

overall economy

by comparison with insulated metal panel installations thermo-wall construction is more economical in practically all cases.

fire resistance

thermo-wall construction is a combination of Carey asbestos-cement board products and fiber board. The asbestos-cement board products have been tested for flame spread, fuel contributed, and smoke developed; the completely "zero" test-results in each case prove the fire resistance of thermo-wall construction.

maintenance

rigid and durable thermo-wall construction requires no painting or replacement; the permanent gray-white interior and exterior surfaces are pleasing in appearance and have a light reflectivity of approximately 60%.

versatility

thermo-wall construction can be designed for installation by several erection methods; roofs can also be laid by the thermo-wall construction system; the materials are completely re-usable and can be removed and re-constructed without special tools or equipment.

some well-known users

Westinghouse Electric & Mfg. Co., Mansfield, Ohio
B. F. Goodrich Co., Niagara Falls, New York; Louisville, Kentucky; Avon Lake, Ohio
Pure Oil Company, Worland, Wyoming
General Electric Company, Richland, Washington
Socony Vacuum Oil Company, Buffalo, New York
Rome Kraft Paper Company, Krannart, Georgia
Pittsburgh Plate Glass Company, Cumberland, Maryland
Texas Company, Tulsa, Oklahoma; Lawrenceville, Illinois
Lincoln AFG, Lincoln, Nebraska
Badger Ordinance Works, Baraboo, Wisconsin
AEC Project, Hanford, Washington
Hallport Hanger & Administration Bldg., Fort Eustis, Va.
Crown Cork & Seal Co., Leeds, Ala.
Universal Oil Products Co., Des Plaines, Ill.
Ames Textile Corp., Cleveland, Ga.
Crosley Div. AVCO Corp., Evendale, Ohio
Jackson Box Co., Cincinnati, Ohio

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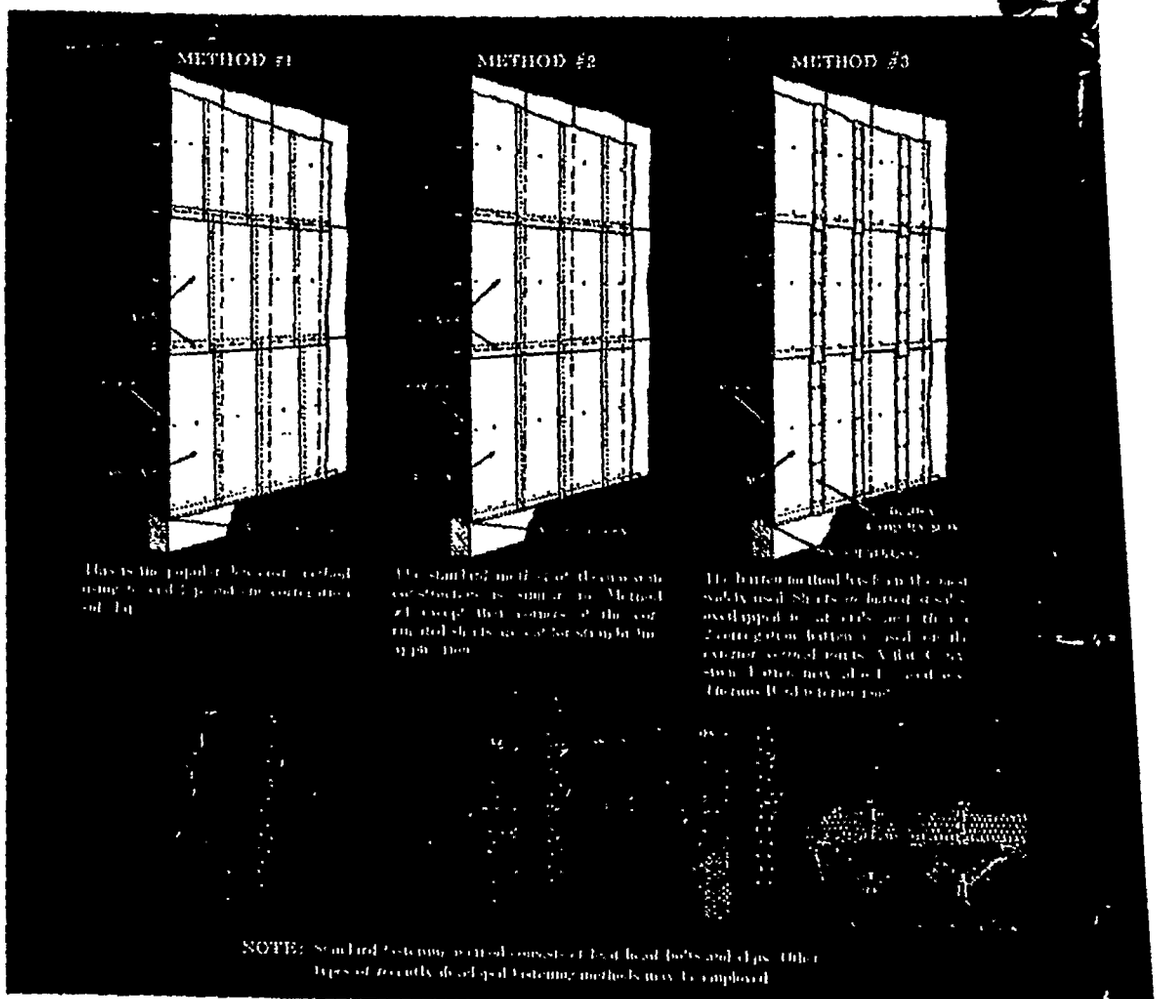
thermo-wall construction

Popular Methods of Erecting and Fastening



NOTE: Standard fastening material consists of lead head bolts and clips. Other types of recently developed fastening methods may be employed.

RECOMMENDED GIRT & PURLIN SPACINGS FOR THERMO-WALL CONSTRUCTION

	¾" THERMO-BORD	1½" THERMO-BORD	1½" THERMO-BORD	2" THERMO-BORD
Max. Girt Spacings	7'0"	8'0"	10'0"	10'0"
Max. Purlin Spacings	4'9"	5'6"	6'3"	7'0"

WARRANTY

We warrant our materials to be of good quality and will replace material proved defective. This warranty is in lieu of all others express or implied and may not be extended by representatives, written or otherwise, or drawings. While we recommend use for our material based on tests believed reliable, we in no way guarantee particular methods of use or application or performance under special conditions.

THE PHILIP Carey MFG. COMPANY

LOCKLAND, CINCINNATI 18, OHIO

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