ENGINEERING RESEARCH INSTITUTE
UNIVERSITY OF MICHIGAN
ANN ARBOR

SUPPLEMENTARY REPORT

STUDIES TO EVALUATE HEAT-TRANSFER COEFFICIENTS OF INSULATED PANELS IV

A. B. EPPLE
Associate Professor of Mechanical Engineering

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This report covers work done under Project 2017-8-9, "Heat-Transfer Coefficients of Insulated Panels IV," sponsored by Giffels and Vallet, Incorporated. Wheeling Steel Corporation and The Steelcraft Manufacturing Company each submitted a panel for test. The tabulation below gives the results of the tests.

Manufacturer	Type Panel	Drawing Number	Overall Transmission Rate Btu/Hr/sq ft/°F
Steelcraft Mfg. Co. Manufacturing Co.	C	Job A-14800-C Sheet 31	.154
Wheeling Steel Corp.	B	18-3772	.242

DESCRIPTION OF PANELS AND ASSEMBLIES

All units were erected on wood supporting members to set them approximately two feet above the floor line. The Steelcraft panels were assembled by factory representatives and the Wheeling Steel panels were viewed and approved by the General Manager after they were assembled by University sheet-metal workers.

Differences in panel construction and assembly may be seen from the following descriptions:

Steelcraft Manufacturing

Felt strips 1/4-inch thick were used to isolate angles from the panel sides in assembling this box. Perforated sheet-metal channels separated the outside and inside metal facing of individual panels. The 3-inch space

between facings was filled with Fiberglas. Calking compound was also spread on the inside of the corner angles before they were assembled.

Wheeling Steel Corp.

No felt or calking compound was used in the construction or assembly of this box. As required with the "B" type panel, the top and bottom extend all the way across the side panels. The metal facings were separated by two inches of Fiberglas and were joined at the sides by a weld in a 1/4-inch hole of an embossing. A Neoprene gasket separated the individual panels from each other at the joint.

INSIDE DIMENSIONS AND SURFACE AREAS OF PANEL ASSEMBLIES

	Length	Width	Height	Area (sq ft)
Steelcraft Mfg. Co.	87	40.5	46.5	131.3
Wheeling Steel Corp.	87	40.5	46.5	131.3

INSTRUMENTATION AND EQUIPMENT

Instrumentation and equipment are the same as those described in the Report of Studies to Evaluate Heat-Transfer Coefficients of Insulated Panels I, Project M905.

PROCEDURE

Procedure followed is also described in report on Project M905.

RESULTS

The following table is a summary of the principal results used to calculate the overall coefficient of heat transfer.

SUMMARY OF RESULTS

	Energy Input Btu/Hr	Inside Air Temp. °F	Room Air Temp. °F	Inside Area Sq Ft	U (Btu)/(Hr) (Sq Ft)/(°F)
Steelcraft Mfg. Co.	1575	161.4	83.5	131.3	.154
Wheeling Steel Corp.	1810	148.2	91.0	131.3	.242