PITTSBURGH TESTING LABORATORY

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OUR: PH-5756
YOUR: G-1269

REPORT

DESCRIPTION - Witnessing Tests of Sheathing Material for Resistance to Racking Under Dry and Wet Conditions on 48" Wide, Square Edge, one-half inch thick, Bestwall Gypsum Sheathing
AT - Bestwall Gypsum Company, Paoli, Penna.
REPORTED TO - Bestwall Gypsum Company, Paoli, Penna. December 28, 1959.

On December 21 and 23. 1959, we visited the Bestwall Gypsum Company at Paoli, Pennsylvania to witness Wet and Dry Racking Tests on the above material.

Test panels, prior to testing, were inspected by us and found to conform with Technical Circular No. 12, Underwriting Division, F. H. A., Washington, D. C.

Test frames were assembled with double end studs which were fastened together with 10 D common nails. Studs were nailed to sole plates with 16 D common nails. Top sole plate was nailed to the top plate with 10 D common nails. No. 1 construction grade wood was used.

Nail spacing on test frames was as follows: 4" on edges, 8" in center. Galvanized roofing nails with a 3/8" to 7/16" head - 1-3/4" long - #11 gage were used. Racking Tests were made in conformance with A. S. T. M. E72-55.

The Dry Series Tests, composing three test panels, were made on December 21, 1959. Deflection was measured with mirror gages. Mirror gage distance was seven feet.

Results of Dry Tests are as follows:

		At Load of 1200 lbs.		At Load of 2400 lbs.	
Test Panel	Total Load, Lbs.	Ave. Total Deflection	Residual Deflection	Ave. Total Deflection	Residual Deflection
No. 1	7400	.08	.00	.16	.07
No. 2	7400	.07	.02	.31	.09
No. 3	8200	.05	.03	.25	.03
Ave. of 3 tests	7666	.066	.017	.240	.063

REMARKS: Load was applied to test panels in increments of 400 lbs.

PLAINTIFF'S EXHIBIT
GP-820

SGP 0025330

OUR: PH-5756
YOUR: G-1269

Bestwall Gypsum Company

December 28, 1959

The Wet Series Tests, composing three test panels, were made on December 23, 1959. Deflection was measured with mirror gages. Mirror gage distance was seven feet.

Results of Wet Tests are as follows:

Test Panel	Total Load, Lbs.	At Load of 1200 Lbs. Ave. Total Deflection	At Load of 1200 Lbs. Residual Deflection	At Load of 2400 Lbs. Ave. Total Deflection	At Load of 2400 Lbs. Residual Deflection
No. 1	5600	.09	.00	.27	.10
No. 2	5000	.10	.02	.35	.11
No. 3	5000	.09	.00	.22	.08
Ave. of 3 tests	5200	.093	.007	.280	.097

Remarks: Load was applied to test panels in increments of 400 lbs.
Panels exceeded the requirements for Racking Strength without diagonal corner bracing as specified in Technical Circular No. 12 titled - "A Standard for Testing Sheathing Materials for Resistance to Racking."

J. Connelly, Inspector.

PITTSBURGH TESTING LABORATORY

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SGP 0025331