



October 2, 1998

Mr. Robert Cauley
U.S. Architectural Products
1 Allen Road
Hampton, NJ 08827

Dear Mr. Cauley:

SUBJECT: PLYCEM CEMENT BOARD

As a service to Avalon Properties, Congoleum SBR and Acrylic flooring adhesives were evaluated on Plycem cement board to determine adhesion properties. The acrylic types out-performed the SBR's as expected, probably due to their inherent toughness. Based on this testing, optimum adhesion of Congoleum felt-backed sheet flooring products can be achieved by using Congoleum AD72 acrylic tile adhesive. Optimum adhesion of Congoleum vinyl composition tile products can be achieved by using Congoleum AD52 Clear Thin-Spread Tile Adhesive.

This testing does not constitute a warranty or guarantee by Congoleum. As with any underlayment panel, the panel manufacturer is responsible for all recommendations and guarantees as to the suitability and performance of the underlayment.

Based on our experience, we believe that a tongue and groove structural panel of this type can increase the risk of joint telegraphing as initial settling or expansion and contraction occur. Furthermore, our tests show that adhesive set-up time is delayed on this panel, and the installer should make appropriate adjustments to ensure that sheet flooring products are securely bonded prior to completion of sealing seams.

Sincerely,

CONGOLEUM CORPORATION

A handwritten signature in black ink, appearing to read "R. Dempsey".

Robert A. Dempsey
Installation Group Manager

cc: E. Janeczek, E. Justice, E. Keithly, B. Quigley

PROJECT: PLYCEM CEMENT BOARD
 TEST PURPOSE: DETERMINE ADHESION OF CONGOLEUM SBR AND ACRYLIC ADHESIVES

SHEET FLOORING WITH WHITE SHIELD FELT BACKING
 90 DEGREE PEEL TEST (SAMPLES AGED 1 WEEK AT 158 F)

<u>SAMPLE</u>	<u>PRODUCT</u>	<u>ADHESIVE AD 72 ACRYLIC</u>	<u>ADHESIVE 3044 (SBR)</u>
1	FUTURA	0	0
2	FUTURA	0	0
3	FUTURA	0	0
AVERAGE		0	0
1	VALUFLOR	0	0
2	VALUFLOR	0	0
3	VALUFLOR	0	0
AVERAGE		0	0

NOTE: A "0" RATING REPRESENTS EXCELLENT ADHESION IN THIS TEST

ADHESIVE SET UP TIME

<u>TIME (HRS)</u>	<u>PRODUCT</u>	<u>ADHESIVE AD72 (ACRYLIC)</u>	<u>ADHESIVE 3044 (SBR)</u>
1	FUTURA	0	0
1.5	FUTURA	10%	0
2.5	FUTURA	100%	30%
3	FUTURA	100%	100%
3.5	FUTURA	N/A	N/A
1	VALUFLOR	0	0
2.5	VALUFLOR	0	0
2.5	VALUFLOR	0	40%
3	VALUFLOR	100%	10%
3.5	VALUFLOR	N/A	100%

NOTE: TYPICAL ADHESION TO WOOD IS 100% IN TWO HOURS

VINYL COMPOSITION TILE PRODUCTS
 90 DEGREE PEEL TEST (SAMPLES AGED 1 WEEK AT 158 F)

<u>SAMPLE</u>	<u>ADHESIVE</u>	
	<u>AD42 (SBR)</u>	<u>AD52 (ACRYLIC)</u>
1	38 FELL OFF	17/16"
2	30 FELL OFF	12/16"
3	29 FELL OFF	11/16"
AVERAGE	32 MINUTES	13/16"