cc: Mr. McClung
Mr. Dick Maloof
Mr. J. Jackson
Mr. B. Carlson ✓

PLAINTIFF'S EXHIBIT

BIR-320

Memo To: From: P. O. Ladner

Subject: LIGHT WEIGHT ARCHITECT 80 NO. 2 COMPONENTS Date: 12/14/84

On December 7, 1984 we ran 4 rolls of 1.85# glass mat on FS-10. This was made into No. 2 Components. The weight was reduced to approximately 86.0#/100 sq. ft. Runnability on FS-10 was good and no immediate problem was observed.

On December 11 and December 12 we ran the same material on FS-20. The material combined well and no immediate handling problems were observed.

The Lab checked several square foot samples on these glass rolls and the weight was approximately the same as the regular 2.0# material, weighing from 1.90 to 2.0. If Management wants to run a 280# shingle this could be achieved by reducing the coating rather than running the weight of the mat down to the bare minimum.

POL/ae

12-12-84

F1 Research Job #1

PAGE 06 JOB CODE SETUP FSPM-10 12/03/84,16:00

JOB CODE EXAMINE 01

TARGET 070.2 lb/unit
MATL 1

MAX 072.0 lb/unit
MIN 068.0 lb/unit

SCAN LIMITS:
- 22.0 in
+ 22.0 in

ALARM LIMITS:
upper 15.0 %
lower 15.0 %

JOB CODE ASSIGN 01

CONVERSION FACTOR 02.97
ROLL 0 or BUNDLE 1

SLOW SENSITIVITY 7.50 secs/unit

DEADZONE 0.3

AUTO ALARM LIMITS - 10.0 %
+ 10.0 %

FAST SENSITIVITY 1.5 sec/ 049.9 fpm

LINESPEED DEADZONE 049.9 fpm

POLARITY 0

COATER - READY

TRIAL RUN 78-6

MARK 25 SABLE BLACK RUN AT FJ

DRY FELT PROPERTIES BY LANE

Identification		A.D. Wt.$_2$ #/850 Ft.	O.D. Wt.$_2$ #/480 Ft.	Caliper, In. /v8.	% Moisture	O.D. Density #/Ft.^{3}	Tensile, #/In. MD/CD	Porosity, SEC/400CC Air 5 Oz. Cylinder	K#	Xylene, SEC	pH (Hot Water Extract)	Total Acidity (% SO^3)	Mill Data
Phillipsdale #3													Tour 1 Reel 8/25/78
Start	Lane 1	59.9	55.4	.066	7.7	20.9	44.4/22.1	72	186	21.0	6.1	.0736	O.D. 54.6, 53.4, 53.8
	2	57.9	53.2	.065	8.1	20.5	45.0/22.3	73	185	23.5	6.1	.0736	K# 182 X-24
	3	58.8	54.3	.065	7.8	21.9	44.6/23.8	75	186	23.0	6.1	.0736	Mullen 38
	4	58.4	54.0	.065	7.6	20.8	43.3/22.2	72	186	23.0	6.1	.0736	
End													
	Lane 1	57.3	53.6	.063	6.5	21.3	44.4/23.4	72	185	21.0	6.1	.0736	
	2	58.6	54.8	.065	6.5	21.1	47.0/22.2	74	185	23.0	6.1	.0736	
	3	58.0	54.3	.064	6.4	21.2	47.6/23.6	70	185	21.0	6.1	.0736	
	4	57.9	54.1	.065	6.5	20.8	46.1/22.7	72	187	22.0	6.1	.0736	
GAF													
Start	Lane 1	56.4	52.3	.059	7.2	22.2	33.1/15.4	59	181	20.0	5.9	.0888	Roll No. 1240-4689
	2	54.7	50.9	.057	7.0	22.3	33.3/15.7	63	180	19.5	5.9	.0888	Mois. 5.2 Xylol 20
	3	60.1	55.9	.060	7.0	23.3	35.5/17.5	69	169	21.0	5.9	.0888	K# 177 9/15/78
	4	55.3	51.4	.056	7.1	22.9	33.9/16.2	62	178	20.0	5.9	.0888	Tour 3-11
End													Mech. Tender B.L.
	Lane 1	55.7	52.5	.060	5.8	21.9	32.2/15.3	52	190	19.0	5.9	.0888	
	2	55.3	52.1	.059	5.9	22.1	32.0/16.0	56	187	18.5	5.9	.0888	
	3	58.3	54.8	.061	6.0	22.5	32.0/17.3	58	182	18.5	5.9	.0888	
	4	54.6	51.1	.057	6.4	22.4	34.6/16.5	58	181	18.5	5.9	.0888	
Shreveport													
Start	Lane 1	62.0	57.6	.063	7.1	22.9	41.2/20.7	120	162	28.0	6.0	.0526	1-8-10-78
	2	58.6	54.6	.060	6.8	22.7	44.2/20.4	112	164	27.0	6.0	.0526	R-7A
	3	59.6	55.5	.062	6.9	22.4	42.7/20.4	110	176	25.0	6.0	.0526	W-56½
	4	59.9	55.6	.061	7.1	22.8	45.4/17.9	101	168	25.0	6.0	.0526	K#-183
End													S-40
	Line 1	60.6	57.0	.064	6.1	22.3	41.9/21.5	104	174	25.0	6.0	.0526	X-22
	2	59.2	55.6	.062	6.1	22.4	42.6/20.5	98	168	26.0	6.0	.0526	
	3	58.1	54.5	.061	6.1	22.3	43.3/19.1	93	173	25.0	6.0	.0526	
	4	61.4	57.5	.064	6.3	22.5	42.7/18.7	84	174	24.0	6.0	.0526	