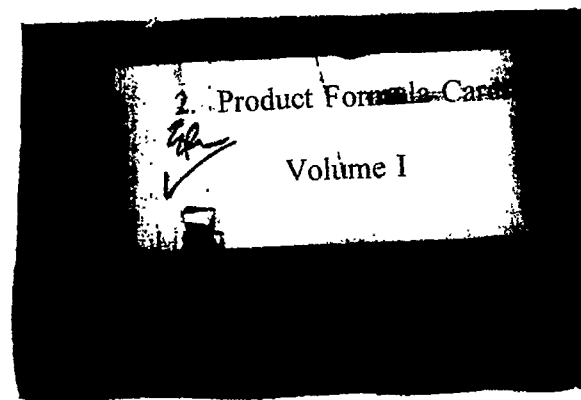




REFLECTO-COAT
ALUMINUM

CHARLESTON, SC
FORMULA CARDS



memo To: J. Lyons - PKL

From: C. Mearns - BBQ

Subject: STANDARD CARDS

Date: January 20, 1984

Attached are the revised standard cards for your files. Please note that I have the necessary cards for our files. Please destroy the outdated cards:

	<u>Issue Date</u>	<u>Supersedes</u>
<u>CHARLESTON</u>		
Slate Mixture - #11 Granules:		
Colonial Green, Firescreen- Jet 80	11/21/83	4/27/73
Snow, Firescreen - Jet 80	11/21/83	4/27/73
Std. Moire, Firescreen, Jet 80	11/21/83	4/27/73
Ebony Black - Ebony Wood Firescreen, Jet 80 Architect 80	11/21/83	4/26/73
Frost, Firescreen, Jet 80	11/21/83	4/27/73
Rustic - Brown Firescreen, Jet 80	11/21/83	New Spec
Meadow Green, Firescreen, Jet 80	11/21/83	4/27/73
Dove, Firescreen, Woodscape, Jet 80	11/21/83	4/27/73
Wood Blende (Cypresswood) Firescreen, Jet 80, Architect 80, Woodscape	11/21/83	9/14/76 7/27/79 4/26/73
Desert Brown Firescreen, Jet 80	11/21/83	4/27/73
Shaketone Architect 80	11/21/83	New Spec
Brown Blende - Mahogany (oakwood) Woodscape (Architect 80) (Firescreen) (Jet 80)	11/21/83	4/27/73 8/14/79
Acorn (Driftwood) Woodscape, (Architect 80)	11/21/83	8/14/79
Beechwood Architect 80	11/21/83	New Spec

STANDARD CARDS
January 20, 1984
Page 2

CHARLESTON

<u>Slate Mixture - #11 Granule- Cont.</u>	<u>Issue Date</u>	<u>Supersedes</u>
Weathered Wood Architect 80	11/17/83	New Spec
Slate Blende Firescreen, Jet 80	11/17/83	4/27/73

/cm
Encl.

PLANTIFF'S EXHIBIT

BIR-980

SHREVEPORT, LA
FORMULA CARDS

BIRD 014401

PRODUCT SPECIFICATIONS

ISSUED DATE 4/12/73
REV.

DIVISION NORWOOD

MACHINE #

PRODUCT CODE _____ PRODUCT NAME 226 S.P. ASPHALT

(#18 Asphalt)

SUPERSEDES: 4/6/70

USE: For making reinforced coating asphalt for FBPW#1 and #9.

FORMULA: Blown by FBQ from blend of 50% Esso 110 S.P. asphalt and 50% Shell 105/115 asphalt.

CODE SPECIFICATIONS:

Min. Std. Max.

S.P., °F.

Pen at 77°F.

Ductility at 77°F.

Flash Point, °F.

Texas Stain, S-I

Sp. Gr. at 60°F.

Wt./gal. at 60°F., lbs.

228

17

-

-

4.5

-

-

-

PROCESS: Blended asphalt pumped from FBA#6 tank thru #1 Rommco Heater to FBQ #5 or #6 vertical stills for air blowing. Blown coating asphalt pumped to FBP#1 and #2 tanks for storage. Manufacturing cycle as follows for a 13,000 gallon charge:

Blended Asphalt Charge (460°F.) 95,115#

Coating Asphalt Yield 92,262#

Shrinkage 3%

Process Cycle:

Charging & Heating

Air Blowing

Pumping to storage

Total Time

1.0 Hr.

3.5 "

1.5 "

6.0 "

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

BB.

PRODUCT SPECIFICATIONS

ISSUED DATE 5/14/73
REV. _____

DIVISION NORWOOD

MACHINE # _____

PRODUCT CODE _____

PRODUCT NAME 226 S.P. REINFORCED COATING ASPHALT

SUPERSEDES: 9/18/62

USE: For all coated products on FBPM# 1 and #9.

CODE	FORMULAE & SPECIFICATIONS	Min.	Std.	Max.
	<u>30% FBW Dust</u>			
	S.P., °F.	230	232	234
	Sp. Gr. @ 60 °F	-	1.2570	-
	Wt./Gal. @ 60°F., lbs.	-	10.490	-
	<u>40% FBW Dust</u>			
	S.P., °F.	230	234	238
	Sp. Gr. @ 60°F.	-	1.2835	-
	Wt./Gal. @ 60°F., lbs.	-	10.711	-
	<u>45% FBW Dust</u>			
	S.P., °F.	232	236	240
	Sp. Gr. @ 60°F.	-	1.3311	-
	Wt./Gal. @ 60°F., lbs.	-	11.109	-
	<u>50% FBW Dust</u>			
	S.P., °F.	235	240	245
	Sp. Gr. @ 60°F.	-	1.4176	-
	Wt./Gal. @ 60°F., lbs.	-	11.830	-

PROCESS: 226 S.P. asphalt is pumped from FBB #1 and #2 storage tanks to the continuous mixers over FBPM#1 where the rock dust is added.

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

AB

NORWOOD

DIVISION

MACHINE #

PRODUCT CODE[illegible]

1170 S. P. ASPHALT

ISSUED DATE 4/12/73
REV.

SUPERSEDES: 1/28/66

Blended with 50% Shell 105/115 flux asphalt for use as blowing stock for 220 S.P. coating asphalt.

FORMULA: 100% Esso 105/115 S.P. Flux Asphalt (LaRosa, Venezuelan base).

<u>CODE</u>	<u>SPECIFICATIONS</u>	<u>Min.</u>	<u>Std.</u>	<u>Max.</u>
1.	S.P., °F.	108	110	112
2.	Pen. at 77°F.	140	150	160
3.	Flash Point	550	-	-
4.	Sp.Gravity at 60°F.	-	1.0075	-
5.	Wt./gal. at 60°F., lbs.	-	8.403	-

PROCESS:

Asphalt is blended and stored in FBA #6 tank. Charges for blowing are pumped thru the #1 Romesco Heater for heating and then to FBQ #5 or #6 for air blowing.

RCD Operating Speed

Production Crew Size

Unit

Copy:

1313

PRODUCT SPECIFICATIONS

ISSUED DATE 4/12/73
REV. _____

DIVISION NORWOOD

MACHINE # _____

PRODUCT CODE _____

PRODUCT NAME _____

105/115 SHELL FLUX ASPHALT

SUPERSEDES: 4/6/70

USES: Blended with 50% Esso 110 S.P. Flux Asphalt and then used as blowing stock for 226 S.P. Coating Asphalt at FBQ.

FORMULA: 100% Venezuelan base Shell flux asphalt.

CODE	SPECIFICATIONS	Min.		Std.		Max.	
	S. P., °F.	105		110		115	
	Pen at 77°F., dmm	140		170		200	
	Flash Point, °F.	575		-		-	
	Sp. Gr. at 60°F.	0.990		-		-	
	Wt./gal. at 60°F, lbs.	8.26		-		-	

PROCESS:

Asphalt pumped from tank truck to FBA #6 tank for blending and storage. Charges are pumped through the #1 Romeo Heater for heating and then to FBQ#5 or #6 vertical still for air blowing.

RCD Operating Speed _____

Production Crew Size _____

Unit _____

Color: _____

1300

PRODUCT SPECIFICATIONS

DIVISION NORWOOD ISSUED DATE 4/12/73
 PRODUCT CODE REV.
 MACHINE #
 PRODUCT NAME 165 S.P. PIONEER ASPHALT
 SUPERSEDES: 11/23/64

USE: In Wind Seal Compound.

FORMULA: 100% Pioneer #235 Shingle Adhesive.

CODE	SPECIFICATIONS	Min.	Std.	Max.
1.	S.P., °F.	160	165	170
2.	Pen at 77°F.	8	10	11
3.	Pen at 115°F.	25	35	45
4.	Flash Point, °F.	550	-	-
5.	Sp. Gravity at 60°F.	-	1.036	-
6.	Wt./Gal. at 60°F., lbs.	-	8.645	-

PROCESS: The tank truck of hot asphalt is pumped into ~~FBA~~ #7 store tank; then pumped to FEB as needed for product formulation.

RCD Operating Speed Production Crew Size Unit

Colors:

234

PRODUCT SPECIFICATIONS

DIVISION CHARLESTON, S. C.

MACHINE # _____

ISSUED DATE 5/7/73
REV. _____

PRODUCT CODE 30-05-000 PRODUCT NAME BIRD REFLECTO COAT-ALUMINUM SURFACING

SUPERSEDES: 7/13/64

CODE	FORMULA	lbs.	GALS.	% BY WEIGHT
14330	Bird #530 Outback (7.96 lbs./gal.)	2436	306	40.6
36600	Varsol #2 (6.70 lbs./gal.)	1200	179	20.0
38000	Naphtha (6.29 lbs./gal.)	264	42	4.4
12750	Asbestos, Finnish (PTI)	900	-	15.0
12750	Aluminum Paste, Alcoa #231	1200	-	20.0
		6000		100.0
SHRINKAGE: <u>4.5%</u>				
YIELD: <u>5730 lbs. (644 gals.) 8.89 lbs./gal.</u>				
PROCESS: <u>Pump Outback into the mixing kettle and then start agitator. Add Varsol #2 and Naphtha. Follow with Aluminum Paste. After this has mixed, add Asbestos, and mix for 20 minutes. Take a sample and check for viscosity. Also take a sample to PKI for o.k.</u>				
CONSISTENCY: <u>At 130°F (PKI viscosimeter 3/4" orifice) 9 seconds.</u>				
17702	CONTAINERS: <u>1 Gal. Cans -- Labels pasted on.</u>			
17704	<u>5 Gal. Cans -- Labels pasted on.</u>			
	Standard Crew <u>3 men</u>			
	Units/Crew Hour <u>1 Gal. 5 Gal.</u>			
	Man Hours / Unit <u>69 43</u>			
		<u>.044</u>	<u>.070</u>	

RCD Operating Speed _____ Production Crew Size 3 Unit _____ Gallons _____

Colors: _____

B22



PRODUCT SPECIFICATIONS

DIVISION CHARLESTON, S. C.

MACHINE #

ISSUED DATE 4/30/73
REV.

PRODUCT CODE 30-05-000 PRODUCT NAME BIRD LAP CEMENT

SUPERSEDES: 10/23/64

CODE	FORMULA	LEBS.	GALS.	% BY WEIGHT
15400	#14 Asphalt	2275	---	68.2
39250	Std. White oil (6.84#/gal.)	680	99.5	20.4
13650	Asbestos 7-R	150	---	4.5
36600	Varsol #2 (6.70#/gal.)	230	34.5	6.9
		3335 lbs.		100.0%

SHRINKAGE: 6% Yield: 3135 lbs. (386 Gals.) 8.13 lbs./Gal.

PROCESS: Run #14 Asphalt (300°F) into mixing kettle and then start agitator and turn on cold circulating water. Start pumping in the Std. White Oil and the screening in of the Asbestos, and then pump in the Varsol #2 after the Std. White Oil is in the mixer. Mix for 20 minutes and then take a sample for testing and O.K. by EKC. Batch temp. must be below 140°F before it is put into containers.

CONSISTENCY: At 100°F (PBL Viscosimeter 3/4" Orifice) - 93 seconds.

FLASHPOINT: (C.O.C.) min. 110° F.

17700 CONTAINERS: 1 pint containers No label.

Standard Crew: 3 Men

1 Pt.

Units/Crew Hour

568

Man Hr./Unit

.0053

RCD Operating Speed

Production Crew Size 3

Unit Pints.

Colors:

BBA



PRODUCT SPECIFICATIONS

ISSUED DATE 4/30/73
REV. _____

DIVISION CHARLESTON, S. C. MACHINE # _____

PRODUCT CODE 32-07-000 PRODUCT NAME BIRD PLASTIC CEMENT
USING CUT-BACK

SUPERSEDES: 4/27/64

CODE	FORMULA MATERIALS	IBS.	GALS.	% BY WEIGHT
14330	Bird #530 Cut-Back (7.96#/gal.)	6,241.9	784	74.0
13650	Asbestos	1,180.9	---	14.0
50050	Soapstone, Emul 36	506.1	---	6.0
40532	EKM Dust	506.1	---	6.0
		8,435.0		100.0%

SHRINKAGE: 2% yield: 8,266.3 lbs. (935.1 gals.) 8.84 lbs./gal.

PROCESS: Pump Cut-Back into mixing kettle and start the agitator. Follow by screening in the asbestos, soapstone, and dust. Take a sample and check for viscosity.

CONSISTENCY: Schutte Viscosimeter @ 77°F. 1 to 6 seconds.
This cement meets government Spec. SS-C-153A, Type I

CONTAINERS: Pint cans Lithographed Cans, 12 cans per case
Quart cans Lithographed Cans, 12 cans per case
1/2 Gallon cans, Lithographed Cans, 6 cans per case.
1 Gallon cans, Lithographed Cans, 4 cans per case
5 Gallon cans, Labels pasted on.

Standard Crew ---3 men

1 lb.	2 1/2 lb.	5 lb.	10 lb.	50 lb.	530 lb.
Units/crew Hour	600	500	200	175	6
Man hrs./Unit	.005	.006	.0150	.0171	.0500
					.5000

NOTE: 1 lb. and 2 1/2 lb. runs are usually limited to 100 cases or 2400 units.

RCD Operating Speed _____ Production Crew Size 3 Unit GALLON

Colors: _____

B.G.

PRODUCT SPECIFICATIONS

ISSUED DATE 4/30/73
REV.

DIVISION CHARLESTON, S. C.

MACHINE #

PRODUCT CODE 3208

PRODUCT NAME

QUICK SET LAP CEMENT

SUPERSEDES: 8/9/62

CODE	FORMULA	IBS.	GALS.	% BY WEIGHT
14200	#18 Asphalt	3970	524	45.7%
36600	Varsol #2 (6.70#/gal.)	2170	324	24.9
13650	#2 (7R) Asbestos	400	---	4.6
56200	FKW Dust	2160	---	24.8
		8700		100.0

SHRINKAGE: 4.5% Yield: 8309 lbs. (856 gal.) 9.70 lbs. per gallon.

PROCESS: Turn cold circulating water on jacket of mixing kettle, then pump #18 asphalt using gage to get correct amount. Start agitator. When temperature of asphalt is down to 300°F. maximum, start pumping in the Varsol #2 and add the asbestos while the solvent is being pumped in. Add the dust after the asbestos. Mix for 30 minutes and take a sample for testing and O.K. by FKC. If making pints, turn steam on kettle circulating jackets.

CONSISTENCY: Schutte viscosity @ 77°F. 3 to 5 seconds.

FLASHPOINT: (C.O.C.) Min. 110°F.

CONTAINERS: Put in one pint cans 300 x 407, and fill to a depth of 4" (15.2 oz. or 0.098 gal. by weight). No labels on cans in roll roofing but can should be capped with letters "QSC" stamped on cover. When specified order, material will be supplied in any of the following containers:

17601	1/2 gal. --Lithographed cans, 6 cans per case (19650)	--37 lbs.
17602	1 gal. --Lithographed cans, 4 cans per case (19750)	--46 lbs.
17704	5 gal. -- Labels pasted on -----	--54 lbs.

Standard Crew -----3 men

	1/2 gal.	1 Gal.	5 Gal.
Units/Crew Hour	460	174	36.7

Man Hr./Unit .007 0.017 0.0818

RCD OPERATING SPEED PRODUCTION CREW SIZE 3 UNIT GALLON

BB₃

PRODUCT SPECIFICATIONS

DIVISION CHARLESTON, S. C.

MACHINE #

PRODUCT CODE 32-10-000

PRODUCT NAME SPECIAL FLASHING CEMENT
USING CUT-BACK

ISSUED DATE 4/30/73
REV.

SUPERSEDES: 10/23/64

FORMULA MATERIALS

CODE		LBS.	GALS.	% BY WEIGHT
14330	Bird #530 Cut-Back	4094.0	514.5	50.6
39250	Standard White Oil (6.84 # / gal.	239.4	35.0	3.0
13650	Asbestos 7-R	1100.0	-----	13.6
59050	Soapstone, Emul 36	1331.8	-----	16.4
56200	PKW Dust	1331.8	-----	16.4
		8097.0		100.0#

SHRINKAGE: 2% Yield: 7935.1 lbs. (741.6 Gals.) 10.7 lbs./gal.

PROCESS: Pump Cut-Back into mixing kettle and then start the agitator. Pump in the solvent and add asbestos and dust. Mix for 20 minutes. take sample and check viscosity.

CONSISTENCY: Schutte Viscosity @77°F 10-15 seconds.

CONTAINERS: 50 lbs. pails

530 lb. drum

#50 pails-----labels pasted on.

STANDARD CREW: 3 men

Units / Crew Hour	1 lb.	2 1/2 lbs.	10 lbs.	50 lb.	530 lb.
Man Hr./Unit	600	460	292	201	51
	.005	.007	.0102	.0149	.0593
					.5000

RCD Operating Speed

Production Crew Size 3

Unit GALLONS

Colors:

BBQ

PRODUCT SPECIFICATIONS

ISSUED DATE 4/30/73
REV.

DIVISION CHARLESTON, S. C.

MACHINE #

PRODUCT CODE 32-12-000

PRODUCT NAME BUILT-UP COLD APPLICATION

BUCA

SUPERSEDES: 11/24/65

CODE FORMULA

LBS. GAL. % BY WEIGHT

15400	Asphalt MKL 4	1,731.6	229	53.6
14200	TKL 8	2,276.8	301	
	(Sp. 175° - 185° F)	4,008.4	530 @ 400°F	
36600	Varsol #2 (6.70 lbs./gal.)	2,572.5	384	34.4
13650	Asbestos, 7 R	897.4		12.0
		7,478.3		100.0

SHRINKAGE: 5% Yield: 7,104.4 lbs. (874 Gal.) 8.13 lbs./gal.

PROCESS: Pump #14 and #18 Asphalt into the mixing kettle. Take a sample to the lab to check the softening point. Allow this to cool over night or turn on cold circulating water. When the temperature is below 350° F., add the Varsol. Allow this to mix and add Asbestos. Continue mixing for 20 minutes and test for consistency.

CONSISTENCY: At 130°F. (PKL Viscosimeter 3/4" Orifice) 23-27 Sec.

17702 CONTAINERS: 1 Gal. Can -- Labels pasted on

17704 5 Gal. Can -- Labels Pasted on

27000 55 Gal. Drums- Stenciled.

Standard Crew- 3 men

Unit / Crew Hour 1 gallon 5 gallons 55 gallons

Man Hours/ Unit 117 30 5.6

.026 .099 .526

RCD Operating Speed

Production Crew Size

3

Unit Gallons

Colors:

BBA

PRODUCT SPECIFICATIONS

ISSUED DATE 4/30/73
REV.

DIVISION CHARLESTON, S. C.

MACHINE #

PRODUCT CODE 32-11-000

PRODUCT NAME

WIND SEAL CEMENT
USING CUT-BACK

SUPERSEDES: 10/23/64

FORMULA MATERIALS

CODE LBS. GALS. % BY WEIGHT

14330 Bird #530 Cut-Back

4,094.0

514.5

51.1

39250 Standard White Oil (6.84#/gal.)

239.4

35.0

3.0

13650 Asbestos 7-R

1,000.0

12.5

59050 Soapstone, Ental 36

1,331.8

16.7

56200 FKW Dust

1,331.8

16.7

7,997.0

100.0%

SHRINKAGE: 2% YIELD: 7,917.0 lbs. (739.9 gals.) 10.7 lbs./gal. 9,744 Cartridges (406 cases)

PROCESS: Pump cut-back into mixing kettle and then start the agitator. Pump in the solvent and add asbestos and dust. Mix for 20 minutes. Take sample and check viscosity.

CONSISTENCY: Schutte Viscosity @ 77°F Sec. Min. 6 Std. 8 Max. 10

12151 CONTAINERS: Put up in printed paper cartridges with plastic nozzles. Then packed in cases with 24 cartridges per case. Case labelled 2 side "Bird Wind Seal Cement." Form #10378. Case also labelled on top: "This Side Up- Do Not Drop." with label form #575.

Total Wt/ case -- 23 lbs.

Standard Crew -- 4 men

Units/crew hour-- 376

Man Hr./ Unit 0.011

RCD Operating Speed

Production Crew Size 3

Unit GALLONS

Colors:

BBQ