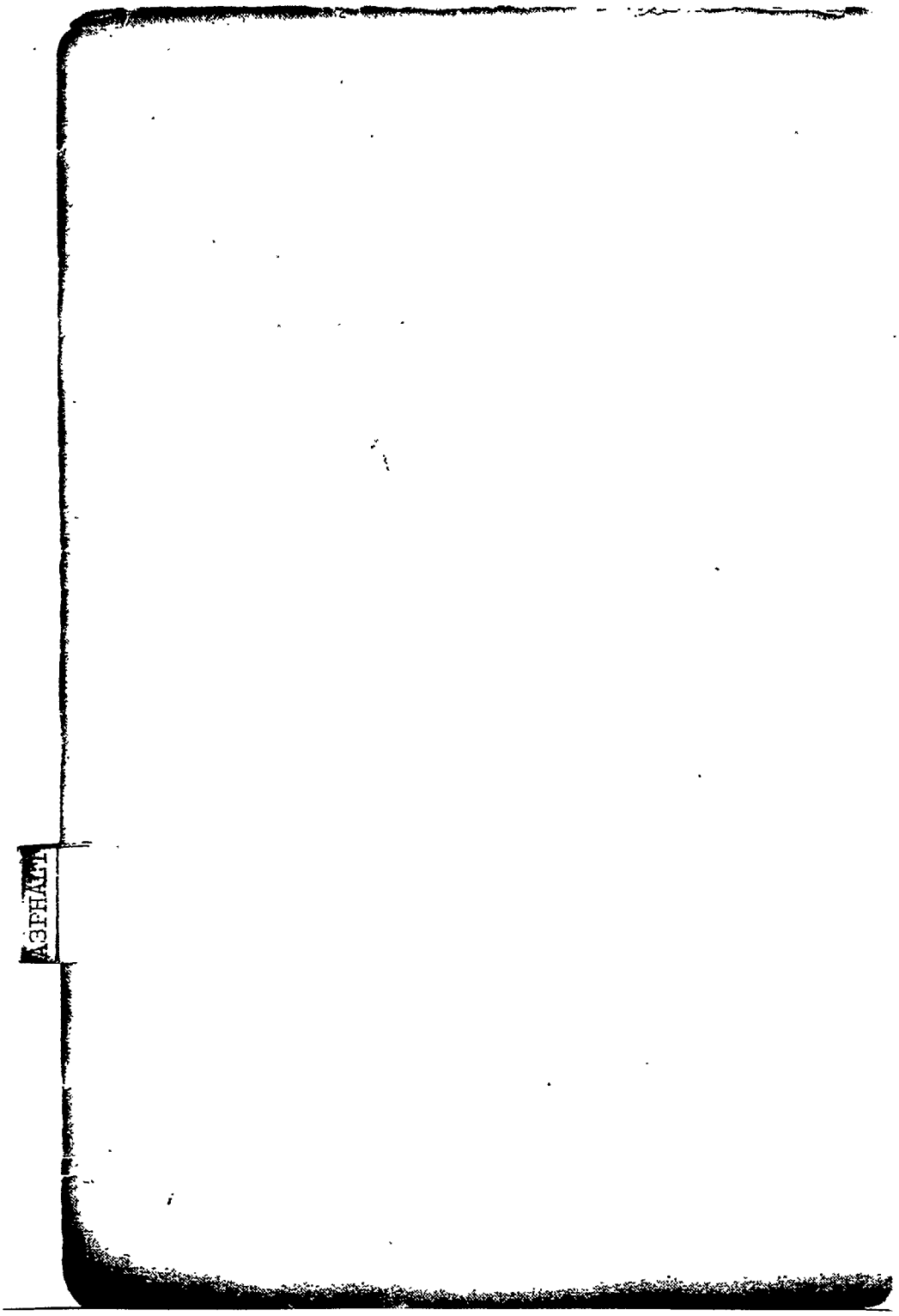
PLAINTIFF'S EXHIBIT

BIR-666



STANDARD SPECIFICATIONS

ROOF COATING (FIBERED)

Formula	% By Wt.	LB.	Gallons
#13-1/2 Asphalt	50.0	3875	508
Asbestos - 7R	12.0	930	
Stoddard Naphtha	38.0	2945	470

Yield - 7518# - 929 Gal. Shrink - 1%

Consistency @ 77°F. - 15 to 25 seconds.

Process:

Run Asphalt into mixer. Turn on water in cooling jacket. Add Asbestos. When temp. is below 200°F. add Naphtha. Each batch must be approved by laboratory.

Containers:

1 gallon, metal, lithographed, packed 6 to case, no filler pieces, 51.25#.
5 gallon, metal, lithographed, 29 Ga. - 42.0#.
30 gallon, metal, black, (Reworked Drums), labels pasted on. Shipping Wt. - 265.0#.
52 gallon, metal, black, (Reworked Drums), labels pasted on. Shipping Wt. - 470.0#

Supersedes specification dated 8-1-60.

RNP/ew

BIRD 006222

8-1-71 FS-PL

STANDARD SPECIFICATIONS
PIASTIC CEMENT

Formula	% by Wt.	lb.	Gallons
#13-1/2 Asphalt	31.0	4829	607
7R Asbestos	14.0	1271	
Ga. Talc	6.5	590	
Glenwood Filler	6.5	590	
Kerosene	3.5	318	26
Stoddard Naphtha	18.5	1683	268

Yield - - 8990# Wt. per Gal. - - 8.93#

Loss - - 1%

Consistency - Schutte @ 77°F. - 4-6 sec.

Process:
Run #13-1/2 asphalt into mixing tank. Turn on water in cooling jacket. When temp. is below 300°F. add Talc, Filler, Asbestos, Kerosene and then Naphtha. Mix for a minimum of 10 minutes after all material has been added before catching sample. Each batch must be approved by laboratory.

Containers:
1 pt. lithographed cans, packed 12 to case, with no filler pieces - 17.75#.
1 qt. lithographed cans, packed 12 to case, no filler pieces - 38#.
1/2 gallon lithographed cans, packed 6 to case, no filler pieces - 34.75#.
1 gallon lithographed cans, packed 6 to case, no filler pieces - 63.6#.
5 gallon, lithographed, 29 Ga., 56.0#.
30 gallon, metal, black, labels pasted on. (Reworked drums) Shipping Wt. - 335#.
52 gallon, metal, black, labels pasted on. (Reworked drums) Shipping Wt. - 585#.

Supersedes Specification Dated 8-1-60.

RNP/ew

BIRD 006223

12/27/63 FS-FL

STANDARD SPECIFICATIONS

BIRD REFLECTO-COAT
ALUMINUM ROOF COATING

Formula	% By Wt.	Lb.	Gallons
Asphalt - #21	28	1120	149
Naphtha-Stoddard	15	600	92
Naphtha - VM&P	23	920	147
Asbestos - PT-1	14	560	
Al Paste - Alcoa #231	20	800	

Yield - 3840# 427 Gal. - 9/0#/Gal.
Loss - 4%
Consistency - Schutea @ 77° - 10 Sec.
8 to 12 Sec.

Process

Run #21 into mixer. Turn water on in cooling jacket. When temperature is below 250°F. add Stoddard Naphtha. After adding Stoddard completely add VM&P. After addition of VM&P add asbestos fibre. After fibre has been added and mixed add Aluminum paste - breaking it up as it is added. Mix for 30 minutes after aluminum has been added and then obtain samples for testing.

Containers -

1 Gallon, plain, labels pasted on.
Packed 6 - 1 gallon cans per carton. Wt. 58.0#
5 Gallon, plain, black - labels pasted on.
Shipping Wt. - 47#

Supersedes Specification dated 3/1/62.

RNP/ae

11/12/57 FSC

STANDARD PRODUCTION

PRODUCT	Std. Per Man Hr.	Labor Unit Cost
1 Lb. Cartridge Quick Set	100	.0154
1 Qt. Quick Set	118	.0130
½ Gal. Quick Set	59	.0260
1 Gal. Quick Set (Sales)	34	.0451
1 Gal. Quick Set (Fixtures)	28	.0548
5 Gal. Quick Set	14	.1096
1 Lb. Plastic Cement	175	.0088
2½ Lb. Plastic Cement	120	.0128
5 Lb. Plastic Cement	55	.0279
10 Lb. Plastic Cement	45	.0341
50 Lb. Plastic Cement	17	.0903
300 Lb. Plastic Cement	2.4	.6396
530 Lb. Plastic Cement	1.5	1.023
1 Pint Lap Cement	228	.0067
1 Gal. Lap Cement	21	.0731
5 Gal. Lap Cement & Nep. Cold	16	.0959
30 Gal. Lap Cement & Nep. Cold	2.5	.6140
52 Gal. Lap Cement & Nep. Cold	2.3	.6674
1 Gal. Roof Coating	50	.0307
5 Gal. Roof Coating	22	.0698
30 Gal. Roof Coating	2.8	.5482
52 Gal. Roof Coating	2.4	.6396
1 Gal. Non-Fib. Rf. Coat.	20	.0768
5 Gal. Non-Fib. Rf. Coat.	14	.1096
52 Gal. Non-Fib. Rf. Coat.	2	.7675
44 Lb. Special Flashing	14	.1096
260 Lb. Special Flashing	2.5	.6140
465 Lb. Special Flashing	2.0	.7675
1 Gal. Asphalt Primer	23	.0667
5 Gal. Asphalt Primer	12	.1279
52 Gal. Asphalt Primer	2	.7675
Built Up Asphalt	18	.0853

Supersedes Standards dated 2-7-57.
RNP/ae

BIRD 006225

8/1/60 FS-PL

STANDARD SPECIFICATION

ASPHALT PROTECTIVE COATING

Formula	% By Wt.	Lbs.	Gallons
#21 Asphalt	49.6	3945	526
Naphtha (Stoddard)	50.4	4013	639

Yield - ~~1142~~ 1153 Gallons
Loss - ~~2%~~ 1% 1 2/11/61

Process:

Run #21 Asphalt into mixer. Turn on water in cooling jacket. When temperature is below 225°F add Naphtha. Each batch must be tested and approved by the laboratory.

Consistency - Schutte - 3/4" Orifice - 1-1/2 - 1-2/3 Sec. @ 62°F.

Containers:

1 Gal. Metal, plain, labels pasted on. Packed 6 to case, no filler pieces per case - 46#.
5 Gal. Metal, black, 29 Ga., labels pasted on. Shipping Wt. - 40.5#.
30 Gal. Metal, black, labels pasted on. Shipping Wt. - 260#. (Reworked drums)
52 Gal. Metal, black, labels pasted on. Shipping Wt. - 451.0# (Reworked drums)

Supersedes Specification dated 3/14/60.

RNP/ae

5/2/60 FS-PL

STANDARD SPECIFICATIONS
PRIMER
(TO MEET GOV'T SPEC. SS-A-701)

Formula	% By Wt.	Lbs.	Gallons
#13-1/2 Asphalt	40	3105	427
Naphtha-Stoddard	60	4658	738

Yield - ~~1342~~ 1153 Gallons

Loss - ~~2%~~ 1% (12/1/61)

Process:
#13-1/2 run into mixer. Turn on water in cooling jacket. When temperature is below 200°F., add Naphtha.

Containers:
5 Gallon drums plain, 29 Ga. - Labels pasted on.
Wt. - 38#.
30 Gallon drums plain - Labels pasted on.
Wt. - 251#. (Reworked)

Min. Flash Point - 110°F.

Supersedes Specification dated 3/22/51.

RNP/ae

BIRD 006227

8/1/60 FS-PL

STANDARD SPECIFICATIONS

NEPONSET COLD CEMENT

Formula	% By Wt.	Lbs.	Gallons
#13-1/2 Asphalt	65.0	5223	697
Kerosene	22.0	1768	271
Naphtha-Stoddard	7.5	603	96
Asbestos 7R	5.5	442	

Yield - ~~7875#~~ 7956# 8.1# per gallon
Loss - ~~2%~~ 1% (previous)

Consistency - Schutte 3/4" Orifice 6 Sec. @ 86°.

Process:
Run #13-1/2 into mixer. Turn on water in cooling jacket. When temperature is below 300°F add Kerosene and Asbestos. When temperature is below 200°F., add Naphtha. Fill containers when temperature is below 160°.

Containers:
1 Gal. Cans - Plain - Labels pasted on. Packed 6 to case, no filler pieces per case - 60#
5 Gal. pails - Black - 29Ga., Labels pasted on. Shipping Wt. - 42#.
30 Gal. Drums - Black - Labels pasted on. Shipping Wt. - 265#. (Reworked drums)
52 Gal. Drums - Black - Labels pasted on. Shipping Wt. - 475#. (Reworked drums)

Supersedes Specification dated 3/14/60.

RNP/ae

BIRD 006228

8/1/60 FS-PL

STANDARD SPECIFICATIONS

LAP CEMENT

Formula	% By Wt.	Lbs.	Gallons
#13-1/2 Asphalt	65.0	5223	697
Kerosene	22.0	1768	271
Naphtha-Stoddard	7.5	603	96
Asbestos 7R	5.5	442	

Yield - ~~7975#~~ 7956# 8.1# per gallon
Loss - ~~2%~~ 1% (estimate)

Consistency - Schutte - 3/4" Orifice - 6 Sec. @ 86°F.

Process:
Run #13-1/2 into mixer. Turn on water in cooling jacket. When temperature is below 300°F. add Kerosene and Asbestos. When temperature is below 200°F., add Naphtha. Fill containers when temperature is below 160°.

Containers:
1 Pt. Cans
1 Gal. Cans - Plain - Labels pasted on. Packed 6 to case, no filler pieces per case. Wt.-60#
5 Gal. drums - Black - 29 Ga., labels pasted on. Shipping Wt. - 42.0#.
30 Gal. Drums - Black - Labels pasted on. Shipping Wt. - 265#. (Reworked drums)
52 Gal. Drums - Black - Labels pasted on. Shipping Wt. - 475#. (Reworked drums)

Supersedes Specification dated 3/14/60.

RNP/ae

BIRD 006229

9/1/67 FS-PL

STANDARD SPECIFICATIONS

SPECIAL FLASHING CEMENT

Formula	% By Wt.	Lbs.	Gallons
#13-1/2 Asphalt	54.0	3828	524
Kerosene	14.0	993	153
VM&P Naphtha	14.0	993	159
Asbestos 6D	9.0	638	
Asbestos 7R	9.0	638	

Yield - 7019# 9# per Gallon
Loss - 1%

	Min.	Max.
Consistency @ 77° Shutte	5 Sec.	10 Sec.

Process: #13-1/2 pumped into mixer, when temperature is below 325°F. add Kerosene, when thoroughly mixed and temperature is below 200°F., add Naphtha, and then the Asbestos.

Containers:
- 44# Drums - Metal, Lithographed, White on Black, 29 Ga. - Shipping Wt. - 49#
- 265# Drums - Plain, Black, Labels pasted on - Shipping Wt. - 295# (Reworked Drums)
- 465# Drums - Plain, Black, Labels pasted on - Shipping Wt. - 515# (Reworked Drums)

Supersedes Specification dated 8/1/60.

RNP/ae

BIRD 006230

8/1/60 FS-PL

STANDARD SPECIFICATIONS

QUICK SETTING LAP CEMENT

Formula	% By Wt.	Lb.	Gallons
Asphalt #21	42.0	3150	420
Kerosene	12.0	900	137
Naputha (Stoddard)	12.0	900	148
Asbestos (7R)	5.0	375	
Glenwood Filler	29.0	2175	

7425# 825

Yield - 7200#, 801 Gal. - 9.0#/Gallon
Loss - 4% 1% (12/11/61)
Consistency - Schutte @ 77° - 6-12 Sec.
Flash Point - 110°F., Minimum - C.O.C.

Process:

Run #21 into mixer, turn on water in water jacket, add Filler and Asbestos. When temperature is below 300°F. add Kerosene. When temperature is below 200°F. add Naphtha. Each batch must be approved by Laboratory.

Containers:

1# Caulking cartridge packed 24 to box - 24.0#
1 Qt., Metal, lithographed, packed 12 to case, no filler pieces - 32#.
1/2 Gal., Metal, lithographed, packed 6 to case, no filler pieces - 35#.
1 Gal., Metal, lithographed, packed 6 to case, no filler pieces - 62#.
5 Gal., Metal, lithographed, 29 Ga., Shipping Wt. 51.0#.

Supersedes Specification dated 3/14/60.

RNP/ae

8/1/58 FS-PL

STANDARD SPECIFICATIONS

Asphalt Flux - FSPM-3

USE - Saturation for all products made on FSPM-3

FORMULA - Purchased from approved sources by Berry Asphalt.

SPECIFICATIONS

Melt Point - °F. Approx. 100° - 115°

Penetration @ 77° 150 MM Minimum

Note: This material is used as received with no processing involved except for heating. There is an estimated 1/2% shrink due to circulating.

New Specification.

RNP/ae

BIRD 006232

8/1/58 FS-PL

STANDARD SPECIFICATIONS

NO. 14 ASPHALT

Approx. 140° M. P. Processed Asphalt.

USE - Saturation for all Products on FSPM-1, Cements and Roof Coating for FSC.

FORMULA - Purchased from approved sources by Berry Asphalt, and also blown in FSQ Stills from Flux storage tank. 60 H. P. motor used in blowing.

Specifications	Soft	Std.	Hard
Melt Point - °F	135°	138°	143°
Penetration @ 77°	60	50	40

Process:
- Charged - 28,864#
- Yield - 27,998#
- Shrink - 3%

Cycle of 5 hours.
- Charging - ½ hr.
- Blowing - 2½ hr.
- Heating - 1½ hr.
- Storage - ½ hr.

Lbs. per gallon - 8.4

Note: If material is purchased it is ready to use as saturation (MP 135° - 145°) and costs $1.00/ton more than Flux Oil that must be processed.

Supersedes Specification dated 6/28/54.

RNP/ae

BIRD 006233

8/1/58 FS-PL

STANDARD SPECIFICATIONS

Bird #16 Asphalt

USE: Built-Up Asphalt - FSC

Approx. 160° M. P. processed Asphalt.

FORMULA: Blown from approx. equal parts of Hosston, Talco, Berry, and Lion flux. The percentage of Hosston flux not to be over 33-1/3%. Blown in FSQ Stills. 60 HP motor used in blowing.

Specifications	Soft	Std.	Hard
Melt Point °F	165	170	175
Penetration @ 77°F	32	28	25

Process:

Charged	-	28,864#
Yield	-	27,998#
Shrink	-	3%

Cycle of 6½ hours composed of

Charging	-	½ hr.
Blowing	-	4 hrs.
Heating	-	1½ hrs.
Storage	-	½ hr.

Lbs. per gallon - 8.4

Pumped to Cement Plant and filled in 100# bags - Special order only.

Supersedes Specification dated 6/28/54.

RNP/ae

7-3-80 SBEP Mt Allen Park 24-27

8/1/58 180-205 FS-PL

STANDARD SPECIFICATIONS

BIRD #18 ASPHALT

Approx. 180° M. P. Processed Asphalt

USE: Built-Up Asphalt - FSC

FORMULA: Blown from approx. equal parts of Hosston, Talco, Berry, and Lion Flux. The percentage of Hosston flux not to be over 33-1/3%. Blown in FSQ Stills. 60 H. P. Motor used in blowing.

Specification	Soft	Std.	Hard
Melt Point °F	190	195	200
Penetration 77°F	23	21	19

Process:

Charged	-	28,864#
Yield	-	27,998#
Shrink	-	3%

Cycle of 8 hours composed of

Charging	-	½ hr.
Blowing	-	5½ hr.
Heating	-	1½ hr.
Storage	-	½ hr.

Lbs. per gallon - 8.4

Pumped to Cement Plant and filled in 100# bags.

Supersedes Specification dated 6/28/54.

RNP/ae

8/1/58 FS-PL

STANDARD SPECIFICATIONS

NO. 21 ASPHALT

Approx. 210° M. P. Processed Asphalt

USE: Asphalt Coating for all roll goods on FSPM-1, Quick Set Lap Cement, Asphalt Protective Coating - FSC.

FORMULA: Blown from approx. equal parts of Hosston, Talco, Berry and Lion fluxes. The percentage of Hosston flux not to be more than 33-1/3%. Blown in FSQ stills. 60 H. P. motor used in blowing.

Specifications	Soft	Std.	Hard
Melt Point - °F	205	210	215
Penetration @ 77°	19	17	15

Process:

Charged	-	28,864#
Yield	-	27,998#
Shrink	-	3%

Cycle of 9 hours composed of

Charging	-	½ hr.
Blowing	-	6½ hr.
Heating	-	1½ hr.
Storage	-	½ hr.

Lbs. per gallon @ 60° - 8.4

Supersedes Specifications dated 6/28/54.

RNP/ae

BIRD 006236

8/1/58 FS-PL

STANDARD SPECIFICATIONS

NO. 21-1/2 ASPHALT

Approx. 215° M. P. Processed Asphalt

USE: Asphalt Coating for all FSPM-1 shingle Products.

FORMULA: Blown from approx. equal parts of Hosston, Talco, Berry and Lion Flux. The percentage of Hosston flux not to be over 33-1/3%. Blown in FSQ stills. 60 H. P. motor used in blowing.

Specifications	Soft.	Std.	Hard
Melt Point - °F	218	224	228
Penetration @ 77°	16	14½	12½

Process:

Charged	-	28,864#
Yield	-	27,998#
Shrink	-	3%

Cycle of 10 hours composed of

Charging	-	½ hr.
Heating & Blowing		8 hrs.
Blowing	-	1 hr.
Storage	-	½ hr.

Lbs. per gallon @ 60° - 8.4

Supersedes Specification dated 6/28/54.

RNP/ae

BIRD 006237