PLAINTIFF'S EXHIBIT

BIR-664

3/1/67 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

SNOW WHITE FUNGUS RESISTANT - WIND SEAL JET

LR 96F White - - - - - 100%

New Specification.

RNPae

BIRD 006074

3/1/67 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

GRANITE GRAY - WIND SEAL JET

Hopper No.	%	Kind of Slate
1	20	A701 White
	80	LR 55 Gray
2	10	A701 White
	35	LR 76 Gray
	55	LR 55 Gray
3	30	A701 White
	30	LR 76 Gray
	40	LR 55 Gray
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

Ruberoid A701 White - - - - - 18.8%
3M LR 76 Gray - - - - - - - - 25.5%
3M LR 55 Gray - - - - - - - - 55.7%

New Specification.

NP/ae

BIRD 006075

3/1/67 PS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

SLATE BLENDE - WIND SEAL JET

Hopper No.	%	Kind of Slate
1	25	LR 22 Red
	35	Glenwood Black
	40	LR 76 Gray
2	20	LR 76 Gray
	80	Glenwood Black
3	15	Glenwood Black
	85	LR 76 Gray
4	Spillover	

Cam Setting

Hopper #1 --Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

3M LR 22 Red - - - - - - 5.6%
3M LR 76 Gray - - - - - 45.6%
Glenwood Black - - - - - 48.8%

NOTE: This blende is not the same as Slate Blende for M. B. and Wind Seal.

New Specification.

RNP/ae

BIRD 006076

3/1/67 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

BROWN BLENDE - WIND SEAL JET

Hopper No.	%	Kind of Slate
1	15	3M 22 Red
	85	3M 41 Brown
2	100	3M 41 Brown
3	100	3M 41 Brown
4	Spillover	

Cam Setting
Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.
3M 22 Red - - - - - 3.4%
3M 41 Brown - - - - 96.6%

New Specification.

RNP/ae

BIRD 006077

4/1/68 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

SLATE BLENDE FOR 9" X 12" HIP AND RIDGE

Hopper No.	%	Kind of Slate
4	5.0%	3M LR 22 Red
	45.0%	3M LR 76 Gray
	50.0%	Glenwood Black

New Specification.

RNP/ae

BIRD 006078

4/1/68 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

GRANITE GRAY FOR 9" X 12" HIP AND RIDGE

Hopper No.	%	Kind of Slate
4	20.0	Ruberoid A701 White
	25.0	3M LR 76 Gray
	55.0	3M LR 55 Gray

New Specification.

RNP/ae

BIRD 006079

4/1/68 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

BROWN BLENDE FOR 9" X 12" HIP AND RIDGE

Hopper No.	%	Kind of Slate
4	5.0	3M LR 22 Red
	95.0	3M LR 41 Brown

New Specification.

RNP/ae

BIRD 006080

4/10/69 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

SABLE BLACK - ARCHITECT MARK 25

Hopper No.	%	Kind of Slate
1	60	3M 5109 Black
	40	3M 5309 Black
2	100	3M 5109 Black
3	90	3M 5109 Black
	10	3M 5309 Black
4	Spillover	

Cam Setting

Hopper #1 Starts 220°, Stops 265°
Hopper #2 Starts 120°, Stops 210°
Hopper #3 Starts 0°, Stops 65°

% Slate per Sq.

3M 5109 Black - - - - - 87.8%
3M 5309 Black - - - - - 12.2%

Supersedes Specification dated 9/1/64.

RNP/ae

BIRD 006081

4/10/69 FS-PL

STANDARD SPECIFICATION

SHADE MIXTURE - #9 GRANULES

RUSTIC BROWN - ARCHITECT MARK 25

Hopper No.	%	Kind of Slate
4	60	3M 4109 Brown
	40	3M 5109 Black

New Specification.

RNPae

BIRD 006082

3/1/67 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

POLAR WHITE - FUNGUS RESISTANT

KING TAB ARCHITECT, ARCHITECT MARK 25

LR 9609F White - - - - - 100%

New Specification.

RNP/ae

BIRD 006083

2/1/68 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

MOIRE BLACK - #23 M. B. ONLY

Hopper No.	%	Kind of Slate
1	40	3M #55 Gray
	30	3M #51 Black
	30	Glenwood Black
2	50	3M #51 Black
	50	Glenwood Black
3	50	3M #51 Black
	50	Glenwood Black
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

3M #55 Gray - - - - - 9.0%
3M #51 Black - - - - 46.0%
Glenwood Black - - - 46.0%

New Specification.

RNP/ae

BIRD 006084

1/1/68 FS-PL

STANDARD SPECIFICATIONS
SHADE MIXTURE - #11 GRANULES
SLATE BLENDE - #23 MASTERBILT, #23 WIND SEAL

Hopper No.	%	Kind of Slate
1	25	LR 22 Red
	35	Glenwood Black
	40	LR 76 Grey
2	20	LR 76 Grey
	80	Glenwood Black
3	15	Glenwood Black
	85	LR 76 Grey
4	Spillover	

Cam Setting
Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Square
3M LR 22 Red - - - - - 5.6%
3M LR 76 Grey - - - - 45.6%
Glenwood Black - - - - 48.8%

Supersedes Specification dated 5/1/63, "Slate Blende for #21 M. B., W. S., #23 M. B., W. S.

RNP/ae

BIRD 006085

8/1/69 FS-PL

STANDARD SPECIFICATION

SHADE MIXTURE - #9 GRANULES

OLIVEWOOD - ARCHITECT 70

#1 & #2 COMPONENTS

Hopper No.	%	Kind of Slate
1	20	3M 1209 Dark Olive
	70	3M 1309 Light Olive
	10	3M 3209 Green
2	35	3M 1209 Dark Olive
	40	3M 1309 Light Olive
	25	3M 3209 Green
3	60	3M 1209 Dark Olive
	30	3M 1309 Light Olive
	10	3M 3209 Green
4		Spillover

Cam Setting - #1 Component
Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

Cam Setting - #2 Component
Hopper #1 - Starts 134°, Stops 207°
Hopper #2 - Starts 68°, Stops 141°
Hopper #3 - Starts 0°, Stops 73°

% Slate per Sq.
3M 1209 Dark Olive - - - - - 39.8%
3M 1309 Light Olive - - - - 43.5%
3M 3209 Green - - - - - - - 16.7%

New Specification.

RNP/ae

BIRD 006086

8/1/69 FS-PL

STANDARD SPECIFICATION

SHADE MIXTURE - #9 GRANULES

OAKWOOD - ARCHITECT 70

#1 & #2 COMPONENTS

Hopper No.	%	Kind of Slate
1	70	3M 4609 Tan
	20	3M 4109 Brown
	10	3M 1209 Dark Olive
2	40	3M 4609 Tan
	55	3M 4109 Brown
	5	3M 1209 Dark Olive
3	25	3M 4609 Tan
	60	3M 4109 Brown
	15	3M 1209 Dark Olive
4	Spillover	

Cam Setting - #1 Component
Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

Cam Setting - #2 Component
Hopper #1 - Starts 134°, Stops 207°
Hopper #2 - Starts 68°, Stops 141°
Hopper #3 - Starts 0°, Stops 73°

% Slate per Sq.
3M 4609 Tan - - - - - 41.9%
3M 4109 Brown - - - - 48.8%
3M 1209 Dark Olive - 9.3%

New Specification.

RNP/ae

BIRD 006087

8/1/69 FS-PL

STANDARD SPECIFICATION

SHADE MIXTURE - #9 GRANULES

OAKWOOD - ARCHITECT 70 HIP & RIDGE
(To be run same as Mark 25 Hip & Ridge)

Hopper No.	%	Kind of Slate
4	40	3M 4609 Tan
	50	3M 4109 Brown
	10	3M 1209 Dark Olive

New Specification.

RNP/ae

BIRD 006088

8/1/69 FS-PL

STANDARD SPECIFICATION

SHADE MIXTURE - #9 GRANULES

OLIVEWOOD - ARCHITECT 70 HIP & RIDGE
(To be run same as Mark 25 Hip & Ridge)

Hopper No.	%	Kind of Slate
4	40	3M 1209 Dark Olive
	45	3M 1309 Light Olive
	15	3M 3209 Green

New Specification.

RNP/ae

BIRD 006089

8/1/69 FS-PL

STANDARD SPECIFICATION

SHADE MIXTURE - #9 GRANULES

SPICEWOOD - ARCHITECT 70 - HIP & RIDGE
(To be run same as Mark 25 Hip & Ridge)

Hopper No.	%	Kind of Slate
4	35	3M 6509 Buff
	45	3M 4609 Tan
	20	3M 4109 Brown

New Specification.

RNP/ee

BIRD 006090

8/1/69 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

SPICEWOOD - ARCHITECT 70

#1 & #2 COMPONENTS

Hopper No.	%	Kind of Slate
1	70	3M 6509 Buff
	20	3M 4609 Tan
	10	3M 4109 Brown
2	30	3M 6509 Buff
	60	3M 4609 Tan
	10	3M 4109 Brown
3	15	3M 6509 Buff
	50	3M 4609 Tan
	35	3M 4109 Brown
4	Spillover	

Cam Setting - #1 Component
Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

Cam Setting - #2 Component
Hopper #1 - Starts 134°, Stops 207°
Hopper #2 - Starts 68°, Stops 141°
Hopper #3 - Starts 0°, Stops 73°

% Slate per Sq.
3M 6509 Buff - - - - - 34.1%
3M 4609 Tan - - - - - 47.7%
3M 4109 Brown - - - - 18.2%

New Specification.

RNP/ae

BIRD 006091

2/1/70 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

CYPRESSWOOD - ARCHITECT 70 HIP AND RIDGE

(To be run same as Mark 25 Hip and Ridge)

Hopper No.	%	Kind of Slate
4	35	3M 6509 Buff
	55	3M 6809 Buff
	10	3M 4109 Brown

New Specification.

RNP/ae

BIRD 006092

2/1/70 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

CYPRESSWOOD - ARCHITECT 70

#1 & #2 COMPONENTS

Hopper No.	%	Kind of Slate
1	85	3M 6509 Buff
	15	3M 6809 Buff
2	15	3M 6509 Buff
	85	3M 6809 Buff
3	33-1/3	3M 6509 Buff
	33-1/3	3M 6809 Buff
	33-1/3	3M 4109 Brown
4	Spillover	

Cam Setting - #1 Component
Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

Cam Setting - #2 Component
Hopper #1 - Starts 134°, Stops 207°
Hopper #2 - Starts 68°, Stops 141°
Hopper #3 - Starts 0°, Stops 73°

% Slate per Sq.
3M 6509 Buff - - - - - 36.0%
3M 6809 Buff - - - - - 53.0%
3M 4109 Brown - - - - 11.0%

New Specification.

RNP/ae

BIRD 006093

2/1/70 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

EBONYWOOD - ARCHITECT 70 HIP AND RIDGE

(To be run same as Mark 25 Hip and Ridge)

Hopper No.	%	Kind of Slate
4	65	3M 5309 Black
	35	3M 5109 Black

New Specification.

RNP/ae

BIRD 006094

2/1/70 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

EBONYWOOD - ARCHITECT 70

#1 & #2 COMPONENTS

Hopper No.	%	Kind of Slate
1	100	3M 5309 Black
2	80	3M 5109 Black
	20	3M 5309 Black
3	100	3M 5309 Black
4	Spillover	

Cam Setting - #1 Component
Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

Cam Setting - #2 Component
Hopper #1 - Starts 134°, Stops 207°
Hopper #2 - Starts 68°, Stops 141°
Hopper #3 - Starts 0°, Stops 73°

% Slate per Sq.
3M 5309 Black - - - - - 64.0%
3M 5109 Black - - - - - 36.0%

New Specification.

RNP/ae

BIRD 006095

1-1-72 FS-PL

STANDARD SPECIFICATION

SHADE MIXTURE - #11 GRANULES

OAKWOOD - ARCHITECT 70 HIP & RIDGE
(To be run same as Mark 25 Hip & Ridge)

Hopper No.	%	Kind of Slate
4	40	3M 46 Tan
	50	3M 41 Brown
	10	3M 12 Dark Olive

Supersedes specification dated 8-1-69.

RNP/ew

BIRD 006096

1-1-72 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

EBONYWOOD - ARCHITECT 70 HIP AND RIDGE

(To be run same as Mark 25 Hip and Ridge)

Hopper No.	%	Kind of Slate
4	10	3M LR 55 Gray
	90	3M LR 54 Black

Supersedes specification dated 2-1-70.

New

BIRD 006097

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

CYPRESSWOOD - ARCHITECT 70 HIP AND RIDGE

(To be run same as Mark 25 Hip and Ridge)

Hopper No.	%	Kind of Slate
4	35	3M 65 Buff
	55	3M 68 Buff
	10	3M 41 Brown

Supersedes specification dated 2-1-70.

RNP/ew

BIRD 006098

1-1-72 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

OAKWOOD - ARCHITECT 70

#1 & #2 COMPONENTS

Hopper No.	%	Kind of Slate
1	70	3M 46 Tan
	20	3M 41 Brown
	10	3M 12 Dark Olive
2	40	3M 46 Tan
	55	3M 41 Brown
	5	3M 12 Dark Olive
3	25	3M 46 Tan
	60	3M 41 Brown
	15	3M 12 Dark Olive
4.	Spillover	

Cam Setting - #1 & #2 Component

Hopper #1 - Starts 134°, Stops 207°
Hopper #2 - Starts 68°, Stops 141°
Hopper #3 - Starts 0°, Stops 73°

% Slate per Sq.

3M 46 Tan - - - - - - - - 41.9%
3M 41 Brown - - - - - - - 48.8%
3M 12 Dark Olive - - - 9.3%

Supersedes specification dated 8-1-69.

RNP/ew

BIRD 006099

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

CYPRESSWOOD - ARCHITECT 70

#1 & #2 COMPONENTS

Hopper No.	%	Kind of Slate
1	85	3M 65 Buff
	15	3M 68 Buff
2	15	3M 65 Buff
	85	3M 68 Buff
3	33-1/3	3M 65 Buff
	33-1/3	3M 68 Buff
	33-1/3	3M 41 Brown
4	Spillover	

Cam Setting - #1 & #2 Component

Hopper #1 - Starts 134°, Stops 207°
Hopper #2 - Starts 68°, Stops 141°
Hopper #3 - Starts 0°, Stops 73°

% Slate per Sq.

3M 65 Buff - - - - - 36.0%
3M 68 Buff - - - - - 53.0%
3M 41 Brown - - - - 11.0%

Supersedes specification dated 2-1-70.

RNP/ew

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

EBONYWOOD - ARCHITECT 70

#1 & #2 COMPONENTS

Hopper No.	%	Kind of Slate
1	40	LR 55 Gray
	60	LR 54 Black
2	100	LR 54 Black
3	100	LR 54 Black
4	Spillover	

Cam Setting - #1 & #2 Component

Hopper #1 - Starts 134°, Stops 207°
Hopper #2 - Starts 68°, Stops 141°
Hopper #3 - Starts 0°, Stops 73°

% Slate per Sq.

LR 55 Gray - - - - - - 8.8%
LR 54 Black - - - - - 91.2%

Supersedes specification dated 2-1-70.

RNP/ew

2-19-72 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

DRIFTWOOD - ARCHITECT-70
#1 & #2 COMPONENTS

Hopper No.	%	Kind of Slate
1.	10	3M 68 Cream
	10	3M 76 Gray
	80	3M 12 Dark Olive
2.	20	3M 55 Gray
	25	3M 41 Brown
	55	3M 12 Dark Olive
3.	30	3M 41 Brown
	70	3M 12 Dark Olive
4.	Spillover	

Cam Setting - #1 & #2 Component
Hopper #1 - Starts 134°, Stops 207°
Hopper #2 - Starts 68°, Stops 141°
Hopper #3 - Starts 0°, Stops 73°

% Slate per Sq.

3M - 68 Cream - 3.4%
3M - 76 Gray - 3.4%
3M - 55 Gray - 6.7%
3M - 41 Brown - 18.2%
3M - 12 Dark Olive - 68.3%

New Specification.

BIRD 006102

2-19-72 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

DRIFTWOOD - ARCHITECT-70 HIP & RIDGE
(TO BE RUN SAME AS MARK-25 HIP & RIDGE)

HOPPER NO.	%	KIND OF SLATE
4	5	3M 68 Cream
	5	3M 76 Gray
	10	3M 55 Gray
	15	3M 41 Brown
	65	3M 12 Dark Olive

New Specification

BIRD 006103

2-17-71 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

BROWN BLENDE - #23 W. S., JET

HOPPER NO.	%	KIND OF SLATE
1	90	3M 41 Brown
	10	3M 51 Black
2	70	3M 41 Brown
	30	3M 51 Black
3	50	3M 41 Brown
	50	3M 51 Black
4	Spillover	

CAM SETTING:

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% SLATE PER SQ.:

3M 41 Brown -- 68.0%
3M 51 Black -- 32.0%

Supersedes specification dated 3/1/67.

RNP/ew

BIRD 006104

7-20-71 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE-#9 GRANULES

RUSTIC BROWN-ARCHITECT MARK-25

Hopper No.	%	Kind of Slate
1.	90	3M 4109 Brown
	10	3M 5109 Black
2.	70	3M 4109 Brown
	30	3M 5109 Black
3.	50	3M 4109 Brown
	50	3M 5109 Black
4.	Spillover	

Cam Setting:

Hopper #1 Starts - 220°, Stops - 265°
Hopper #2 Starts - 120°, Stops - 210°
Hopper #3 Starts - 0°, Stops - 65°

% Slate Per Sq.

3M 4109 Brown - 68.0%
3M 5109 Black - 32.0%

Supersedes Specification Dated 4/10/69

RNp/ew

BIRD 006105

2-17-71 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

NORWOOD TAN - #23 WIND SEAL

HOPPER NO.	%	KIND OF SLATE
1	40	3M 68 Cream
	35	3M 49 Lt. Brown
	25	Ruberoid 701 White
2	35	3M 68 Cream
	55	3M 49 Lt. Brown
	10	Ruberoid 701 White
3	45	3M 68 Cream
	40	3M 49 Lt. Brown
	10	Ruberoid 701 White
	5	3M 41 Brown
4	Spillover	

CAM SETTING:

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% SLATE PER SQ.:

3M 68 Cream --- 39.4
3M 49 Light Brown -- 46.0
Ruberoid 701 White - 12.9
3M 41 Brown --- 1.7

New Specification

KNP/ew

5/1/69 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

TAWNY - ARCHITECT MARK 25

HOPPER NO.	%	KIND OF SLATE
1	50	3M 1209 Dark Olive
	20	3M 1309 Light Olive
	30	3M 4109 Brown
2	30	3M 1209 Dark Olive
	40	3M 1309 Light Olive
	30	3M 4109 Brown
3	25	3M 1209 Dark Olive
	25	3M 1309 Light Olive
	50	3M 4109 Brown
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

3M 1209 Dark Olive - - - - - 32.9%
3M 1309 Light Olive - - - - 28.4%
3M 4109 Brown - - - - - - - 38.7%

New Specification.

RNP/ae

BIRD 006107

5/1/69 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

TAWNY - MARK 25 HIP AND RIDGE

HOPPER NO.	%	KIND OF SLATE
4	30	3M 1209 Dark Olive
	30	3M 1309 Light Olive
	40	3M 4109 Brown

New Specification.

RNP/ae

3/1/69 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

DELTA - ARCHITECT MARK 25

HOPPER NO.	%	KIND OF SLATE
1	50	3M 1209 Dark Olive
	50	3M 1309 Light Olive
2	50	3M 1309 Light Olive
	50	3M 3209 Green
3	40	3M 1209 Dark Olive
	20	3M 1309 Light Olive
	40	3M 3209 Green
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

3M 1209 Dark Olive - - - - - 24.2%
3M 1309 Light Olive - - - - 40.2%
3M 3209 Green - - - - - - - 35.6%

New Specification.

RNP/ae

3/1/69 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

DELTA - MARK 25 HIP AND RIDGE

HOPPER NO.	%	KIND OF SLATE
4	25	3M 1209 Dark Olive
	40	3M 1309 Light Olive
	35	3M 3209 Green

New Specification.

RNP/ae

BIRD 006110

3/1/69 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

LAMPLIGHTER - ARCHITECT MARK 25

HOPPER NO.	%	KIND OF SLATE
1	30	3M 1209 Dark Olive
	45	3M 1309 Light Olive
	25	3M 3209 Green
2	10	3M 1209 Dark Olive
	65	3M 1309 Light Olive
	25	3M 3209 Green
3	25	3M 1209 Dark Olive
	50	3M 1309 Light Olive
	25	3M 3209 Green
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

3M 1209 Dark Olive - - - 19.3%
3M 1309 Light Olive - - 55.7%
3M 3209 Green - - - - - 25.0%

New Specification.

RNP/ae

BIRD 006111

3/1/69

FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

LAMPLIGHTER - MARK 25 HIP AND RIDGE

HOPPER NO.	%	KIND OF SLATE
4	20	3M 1209 Dark Olive
	55	3M 1309 Light Olive
	25	3M 3209 Green

New Specification.

RNP/ae

BIRD 006112

3/1/69 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

ARBORVITAE - ARCHITECT MARK 25

HOPPER NO.	%	KIND OF SLATE
1	60	3M 5109 Black
	20	3M 5309 Black
	20	3M 1309 Light Olive
2	40	3M 5109 Black
	40	3M 5309 Black
	20	3M 1309 Light Olive
3	20	3M 5109 Black
	30	3M 5309 Black
	50	3M 1309 Light Olive
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

3M 5109 Black - - - - - - - - 38.0%
3M 5309 Black - - - - - - - - 32.3%
3M 1309 Light Olive - - - - 29.7%

New Specification.

RNP/ae

BIRD 006113

3/1/69 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

ARBORVITAE - MARK 25 HIP AND RIDGE

HOPPER NO.	%	KIND OF SLATE
4	40	3M 5109 Black
	30	3M 5309 Black
	30	3M 1309 Light Olive

New Specification.

RNP/ae

BIRD 006114

3/1/69 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

CANYON - ARCHITECT MARK 25

HOPPER NO.	%	KIND OF SLATE
1	60	LR 4109 Brown
	20	LR 4609 Tan
	20	LR 1309 Light Olive
2	40	LR 4109 Brown
	40	LR 4609 Tan
	20	LR 1309 Light Olive
3	20	LR 4109 Brown
	30	LR 4609 Tan
	50	LR 1309 Light Olive
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

LR 4109 Brown ---------- 38.0%
LR 4609 Tan ---------- 32.3%
LR 1309 Light Olive ---- 29.7%

New Specification.

RNP/ae

3/1/69 PS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

CANYON - MARK 25 HIP AND RIDGE

HOPPER NO.	%	KIND OF SLATE
4	40	LR 4109 Brown
	30	LR 4609 Tan
	30	LR 1309 Light Olive

New Specification.

RNP/ae

3/1/69 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

PRAIRIE GOLD - WIND SEAL JET

HOPPER NO.	%	KIND OF SLATE
1	30	3M 12 Dark Olive
	45	3M 13 Light Olive
	25	3M 32 Green
2	10	3M 12 Dark Olive
	65	3M 13 Light Olive
	25	3M 32 Green
3	25	3M 12 Dark Olive
	50	3M 13 Light Olive
	25	3M 32 Green
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

3M 12 Dark Olive - - - - - - 19.3%
3M 13 Light Olive - - - - - 55.7%
3M 32 Green - - - - - - - - 25.0%

New Specification.

RNP/ae

BIRD 006117

3/1/69 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE -#11 GRANULES

PRAIRIE GOLD FOR 9" X 12" HIP AND RIDGE

HOPPER NO.	%	KIND OF SLATE
4	20	3M 12 Dark Olive
	55	3M 13 Light Olive
	25	3M 32 Green

New Specification.

RNP/ae

5/1/69 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

FIELDSTONE - WIND SEAL JET

HOPPER NO.	%	KIND OF SLATE
1	50	LR 12 Dark Olive
	20	LR 13 Light Olive
	30	LR 41 Brown
2	30	LR 12 Dark Olive
	40	LR 13 Light Olive
	30	LR 41 Brown
3	25	LR 12 Dark Olive
	25	LR 13 Light Olive
	50	LR 41 Brown
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

3M 12 Dark Olive - - - - - - 32.9%
3M 13 Light Olive - - - - - 28.4%
3M 41 Brown - - - - - - - - 38.7%

Supersedes Specification dated 3/1/69

RNP/ae

5/1/69 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

FIELDSTONE FOR 9" X 12" HIP AND RIDGE

HOPPER NO.	%	KIND OF SLATE
4	30	3M 12 Dark Olive
	30	3M 13 Light Olive
	40	3M 41 Brown

Supersedes Specification dated 3/1/69

RNP/ae

BIRD 006120

3/1/69 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

ADOBE - WIND SEAL JET

HOPPER NO.	%	KIND OF SLATE
1	60	3M 41 Brown
	20	3M 46 Tan
	20	3M 13 Light Olive
2	40	3M 41 Brown
	40	3M 46 Tan
	20	3M 13 Light Olive
3	20	3M 41 Brown
	30	3M 46 Tan
	50	3M 13 Light Olive
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

3M 41 Brown - - - - - - - - 38.0%
3M 46 Tan - - - - - - - - - 32.3%
3M 13 Light Olive - - - - 29.7%

New Specification.

RNP/ae

BIRD 006121

3/1/69 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

ADOBE FOR 9" x 12" HIP AND RIDGE

HOPPER NO.	%	KIND OF SLATE
4	40	3M 41 Brown
	30	3M 46 Tan
	30	3M 13 Light Olive

New Specification.

RNP/ae

BIRD 006122

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

HEATH GREEN - WIND SEAL JET

HOPPER NO.	%	KIND OF SLATE
1	60	3M 51 Black
	20	Glenwood Black
	20	3M 13 Light Olive
2	40	3M 51 Black
	40	Glenwood Black
	20	3M 13 Light Olive
3	20	3M 51 Black
	30	Glenwood Black
	50	3M 13 Light Olive
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

3M 51 Black ---- - 38.0%
Glenwood Black - - 32.3%
3M 13 Light Olive 29.7%

New Specification.

RNP/ae

3/1/69 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

HEATH GREEN FOR 9" X 12" HIP AND RIDGE

HOPPER NO.	%	KIND OF SLATE
4	40	3M 51 Black
	30	Glenwood Black
	30	3M 13 Light Olive

New Specification.

RNP/ee

BIRD 006124

STANDARD SPECIFICATIONS
SHADE MIXTURE - #9 GRANULES
SLATE BLENDE - ARCHITECT MARK 25

Hopper No.	%	Kind of Slate
1.	40	3M 519 Black
	20	3M 229 Red
	40	3M 769 Gray
2.	40	3M 519 Black
	5	3M 229 Red
	55	3M 769 Gray
3.	60	3M 519 Black
	5	3M 229 Red
	35	3M 769 Gray
4.	Spillover.	

Cam Setting

Hopper #1, Starts 220°, Stops 265°
Hopper #2, Starts 120°, Stops 210°
Hopper #3, Starts 0°, Stops 65°

% Slate Per Square.

3M 519 Black - 46.5%
3M 229 Red - 8.4%
3M 769 Gray - 45.1%

New Specification

BIRD 006125

STANDARD SPECIFICATIONS
SHADE MIXTURE - #9 GRANULES
EMERALD GREEN - ARCHITECT MARK 25

Hopper No.	%	Kind of Slate
1.	50	3M - 1609 Green
	50	3M - 3709 Green
2.	20	3M - 1609 Green
	80	3M - 3709 Green
3.	85	3M - 1609 Green
	15	3M - 3709 Green
4.	Spillover	

Cam Setting

Hopper #1, Starts 220°, Stops 265°
Hopper #2, Starts 120°, Stops 210°
Hopper #3, Starts 0°, Stops 65°

% Slate Per Square

3M 1609 Green - 49.5%
3M 3709 Green - 50.5%

New Specification.

BIRD 006126

9/1/64

STANDARD SPECIFICATIONS

SNOW FLAKE WHITE - ARCHITECT MARK 25

Hopper No.	%	Kind of Slate
1.	90	3M-969 White
	10	3M-5609 Silver Gray
2.	100	3M-969 White
3.	75	3M-969 White
	25	3M-5609 Silver Gray
4.	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate Per Sq.

3 M 969 White - 89.6
3 M 5609 Gray - 10.4

New Specification

BIRD 006127

STANDARD SPECIFICATIONS
SHADE MIXTURE - #9 GRANULES
SABLE BLACK - ARCHITECT MARK 25

Hopper No.	%	Kind of Slate
1.	70	3M 519 Black
	30	3M 539 Black
2.	90	3M 519 Black
	10	3M 539 Black
3.	90	3M 519 Black
	10	3M 539 Black
4.	Spillover	

Cam Setting

Hopper #1, Starts 220°, Stops 265°
Hopper #2, Starts 120°, Stops 210°
Hopper #3, Starts 0°, Stops 65°

% Slate Per Square.

3M 519 Black - 85.6%
3M 539 Black - 14.4%

New Specification

BIRD 006128

STANDARD SPECIFICATIONS
SHADE MIXTURE - #9 GRANULES
BLACK PEARL - ARCHITECT MARK 25

Hopper No.	%	Kind of Slate
1.	60	3M 519 Black
	30	3M 539 Black
	10	3M 5609 Silver Gray
2.	75	3M 539 Black
	25	3M 5609 Silver Gray
3.	95	3M 519 Black
	5	3M 539 Black
4.	Spillover.	

Cam Setting

Hopper #1, Starts 220°, Stops 265°
Hopper #2, Starts 120°, Stops 210°
Hopper #3, Starts 0°, Stops 65°

% Slate Per Square

3M 519 Black - 44.3%
3M 539 Black - 42.2%
3M 5609 Silver Gray - 13.5%

New Specification.

BIRD 006129

9/1/64 FS-PL

STANDARD SPECIFICATIONS
SHADE MIXTURE - #9 GRANULES
ASCOT GRAY - ARCHITECT MARK 25

Hopper No.	%	Kind of Slate
1.	60	3M 5609 Silver Gray
	20	3M 769 Gray
	20	3M 539 Gray
2.	75	3M 5609 Silver Gray
	25	3M 7609 Gray
3.	75	3M 769 Gray
	25	3M 539 Black
4.	Spillover.	

Cam Setting

Hopper #1, Starts 220°, Stops 265°
Hopper #2, Starts 120°, Stops 210°
Hopper #3, Starts 0°, Stops 65°

% Slate Per Square

3M 5609 Silver Gray - 47.0%
3M 769 Gray - 40.0%
3M 539 Gray - 13.0%

New Specification.

BIRD 006130

9/1/64

FS-PL

STANDARD SPECIFICATIONS
SHADE MIXTURE - #9 GRANULES
CARDINAL RED - ARCHITECT MARK 25

Hopper No.	%	Kind of Slate
1.	50	3M 519 Black
	50	3M 229 Red
2.	20	3M 519 Black
	80	3M 229 Red
3.	40	3M 519 Black
	60	W 229 Red
4.	Spillover.	

Cam Setting

Hopper #1, Starts 220°, Stops 265°
Hopper #2, Starts 120°, Stops 210°
Hopper #3, Starts 0°, Stops 65°

% Slate Per Square.

3M 519 Black - 33.0%
3M 229 Red - 67.0%

New Specification.

BIRD 006131

9/1/64 FS-PL

STANDARD SPECIFICATIONS
SHADE MIXTURE - #9 GRANULES
CIRRUS BLENDE - ARCHITECT MARK 25

Hopper No.	%	Kind of Slate
1.	70	3M 969 White
	30	3M 7509 Gray
2.	90	3M 969 White
	10	3M 7509 Gray
3.	50	3M 969 White
	50	3M 7509 Gray
4.	Spillover.	

Cam Setting

Hopper #1, Starts 220°, Stops 265°
Hopper #2, Starts 120°, Stops 210°
Hopper #3, Starts 0°, Stops 65°

% Slate Per Square.

3M 969 White - 72.2%
3M 7509 Gray - 27.8%

New Specification

9/1/64

FS-PL

STANDARD SPECIFICATIONS
SHADE MIXTURE - #9 GRANULES
CINNAMON BROWN - ARCHITECT MARK 25

Hopper No.	%	Kind of Slate
1.	55	3M 469 Tan
	35	3M 419 Brown
	10	3M 229 Red
2.	15	3M 469 Tan
	75	3M 419 Brown
	10	3M 229 Red
3.	80	3M 419 Brown
	20	3M 229 Red
4.	Spillover	

Cam Setting

Hopper #1, Starts 220°, Stops 265°
Hopper #2, Starts 120°, Stops 210°
Hopper #3, Starts 0°, Stops 65°

% Slate Per Square.

3M 469 Tan - 19.0%
3M 419 Brown- 68.0%
3M 229 Red - 13.0%

New Specification

BIRD 006133

3/1/65 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

CINNAMON BROWN - MARK 25 HIP & RIDGE

Hopper No.	%	Kind of Slate
4	20	3M 4609 Tan
	70	3M 4109 Brown
	10	3M 2209 Red

New Specification.

RNP/ae

BIRD 006134

3/1/65 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

CIRRUS BLENDE - MARK 25 HIP & RIDGE

Hopper No.	%	Kind of Slate
4	70	3M 9609 White
	30	3M 7509 Gray

New Specification.

RNP/ae

BIRD 006135

3/1/65 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

CARDINAL RED - MARK 25 HIP & RIDGE

Hopper No.	%	Kind of Slate
4	35	3M 5109 Black
	65	3M 2209 Red

New Specification.

RNP/ae

3/1/65 FS-PL

STANDARD SPECIFICATION

SHADE MIXTURE - #9 GRANULES

ASCOT GRAY - MARK 25 HIP & RIDGE

Hopper No.	%	Kind of Slate
4	45	3M 5609 Silver Gray
	40	3M 7609 Gray
	15	3M 5309 Gray

New Specification.

RNP/ae

BIRD 006137

3/1/65 FS-PL

STANDARD SPECIFICATION

SHADE MIXTURE - #9 GRANULES

BLACK PEARL - MARK 25 HIP & RIDGE

Hopper No.	%	Kind of Slate
4	45	3M 5109 Black
	40	3M 5309 Black
	15	3M 5609 Silver Gray

New Specification.

RNP/ae

BIRD 006138

3/1/65 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

SABLE BLACK - MARK 25 HIP & RIDGE

Hopper No.	%	Kind of Slate
4	85	3M 5109 Black
	15	3M 5309 Black

New Specification.

RNP/ae

3/1/65 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

SNOW FLAKE WHITE - MARK 25 HIP & RIDGE

Hopper No.	%	Kind of Slate
4	90	3M 9609 White
	10	3M 5609 Gray

New Specification.

RNP/ae

BIRD 006140

3/1/65 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

EMERALD GREEN - MARK 25 HIP & RIDGE

Hopper No.	%	Kind of Slate
4	50	3M #1609 Green
	50	3M #3709 Green

New Specification.

RNP/ae

BIRD 006141

3/1/65 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

SLATE BLENDE - MARK 25 HIP & RIDGE

Hopper No.	%	Kind of Slate
4	45	3M #5109 Black
	45	3M #7609 Gray
	10	3M #2209 Red

New Specification.

ENP/ae

BIRD 006142

10/1/63 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

WOOD BLENDE - #23 MASTER-BILT, #23 WIND SEAL

Hopper No.	%	Kind of Slate
1	85	3M #LR 65 Buff
	15	3M #LR 68 Buff
2	15	3M #LR 65 Buff
	85	3M #LR 68 Buff
3	33-1/3	3M #LR 65 Buff
	33-1/3	3M #LR 68 Buff
	33-1/3	3M #LR 41 Brown
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

3M #LR 65 Buff - - - - 36.6%
3M #LR 68 Buff - - - - 52.5%
3M #LR 41 Brown - - - 10.9%

New Specification.

RNP/ae

BIRD 006143

7/1/58 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

MOIRE BLACK - #21 M. B.

Hopper No.	%	Kind of Slate
1	40	LR 55 Gray
	60	LR 54 Black
2	100	LR 54 Black
3	100	LR 54 Black
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

LR 55 Gray - 8.8%
LR 54 Black - 91.2%

New Specification

RNP/ae

BIRD 006144

10/24/64 FS-FL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

GOTHIC SLATE BLENDE - KING TAB ARCHITECT

Hopper #	%	Kind of Slate
1	25	3M - 2209 Red
	35	3M - 5309 Black
	40	3M - 7609 Gray
2	50	3M - 5309 Black
	50	3M - 5109 Black
3	20	3M - 5109 Black
	80	3M - 7609 Gray
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

3M 2209 Red - - - - - - - 5.6%
3M 5109 Black - - - - - - 29.0%
3M 5309 Black - - - - - - 30.4%
3M 7609 Grey - - - - - - 35.0%

Supersedes Specification dated 10/1/62.

RNP/ae

BIRD 006145

2/1/60 FS-PL

STANDARD SPECIFICATION

SHADE MIXTURE - #9 GRANULES

DONEGAL GREEN - KING TAB ARCHITECT

Hopper No.	%	Kind of Slate
1	60	K9-G5 Green
	40	K9-W6 White
2	30	K9-G5 Green
	70	K9-W6 White
3	10	K9-G5 Green
	90	K9-W6 White
4	Spillover	

Cam Setting

Hopper #1 - Starts 220° Stops 265°
Hopper #2 - Starts 120° Stops 210°
Hopper #3 - Starts 0° Stops 65°

% Slate per Sq.

K9-G5 Green - - - - 30%
K9-W6 White - - - - 70%

Supersedes Specification dated 1/1/56.

BNP/ae

BIRD 006146

1/1/56 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

CORNWALL GRAY - KING TAB ARCHITECT

Hopper No.	%	Kind of Slate
1	75	K9-B2 Black
	25	K9-BL4 Blue
2	50	K9-B2 Black
	50	K9-BL 4 Blue
3	20	K9-B2 Black
	80	K9-BL 4 Blue
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

K9-B2 Black - - - - - 46%
K9-BL 4 Blue - - - - 54%

New Specification.

RNP/ae

BIRD 006147

2/1/60 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

RUMFORD RED - KING TAB ARCHITECT

Hopper No.	%	Kind of Slate
1	35	K-9 W6 White
	65	K-9 R5 Red
2	70	K-9 W6 White
	30	K-9 R5 Red
3	10	K-9 W6 White
	90	K-9 R5 Red
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

K-9 W6 White - - - - - 42.6%
K-9 R5 Red - - - - - - 57.4%

Supersedes Specification dated 2/1/56.

RNP/ae

BIRD 006148

2/1/60 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

ROYAL ERMINE - KING TAB ARCHITECT

Hopper No.	%	King of Slate
1	50	K-9 W6 White
	25	K-9 G4 Green
	25	Glenwood #9 Black
2	80	K-9 W6 White
	20	K-9 G4 Green
3	95	K-9 W6 White
	5	K-9 G4 Green
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

K-9 W6 White - - - - - 78.2%
K-9 G4 Green - - - - - 16.2%
Glenwood #9 Black - - 5.6%

Supersedes Specification dated 2/1/56.

RNP/ae

BIRD 006149

10/1/62 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

TOWER BLACK - KING TAB ARCHITECT, SEAL KING

Hopper No.	%	Kind of Slate
1	100	K9 B1 Black
2	50	K9 B1 Black
	50	K9 B2 Black
3	100	K9 B1 Black
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

K-9 B1 Black - - - - - 80%
K-9 B2 Black - - - - - 20%

Supersedes Specification dated 7/6/56.

RMP/ae

10/1/62 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

GOTHIC SLATE BLENDE - KING TAB ARCHITECT, SEAL KING

Hopper No.	%	Kind of Slate
1	55	K-9 B2 Black
	45	K-9 R5 Red
2	50	K-9 B1 Black
	50	K-9 B2 Black
3	80	K-9 G4 Green
	20	K-9 B1 Black
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

K9 R5 Red - - - - - 10.12%
K9 B1 Black - - - - 29.00%
K9 B2 Black - - - - 34.88%
K9 G4 Green - - - - 26.00%

Supersedes Specification dated 2/1/60.

RNP/ae

BIRD 006151

2/1/60 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #9 GRANULES

HIGHLAND BROWN - KING TAB ARCHITECT

Hopper No.	%	King of Slate
1	35	K-9 W6 White
	65	K-9 BR4 Brown
2	70	K-9 W6 White
	30	K-9 BR4 Brown
3	10	K-9 W6 White
	90	K-9 BR4 Brown
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

K-9 W6 White - - - - 42.6%
K-9 BR4 Brown - - - 57.4%

Supersedes Specification dated 2/1/56.

RNP/ae

2/1/60 FS-FL

STANDARD SPECIFICATION

SHADE MIXTURE - #9 GRANULES

POLAR WHITE - KING TAB ARCHITECT

K9-W6 White #9 Grading - - 100%

Supersedes Specification dated 7/1/54.

RNP/ae

BIRD 006153

9/1/55 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

FROST BLENDE - RANCH ROOF

Hopper No.	%	Kind of Slate
1	50	LR 96 White
	25	Glenwood Black
	25	Funk. Sea Green
2	80	LR 96 White
	20	Funk Sea Green
3	95	LR 96 White
	5	Funk. Sea Green
4	Spillover	

Cam Setting
Hopper #1 - Starts 134°, Stops 207°
Hopper #2 - Starts 68°, Stops 141°
Hopper #3 - Starts 0°, Stops 73°

Blende cycle 54", all bands 11", spillover between each band.

% Slate per Sq.
3M LR 96 White - - - - 71.8%
Glenwood Black - - - - 5.6%
Funk. Sea Green - - - 22.6%

New Specification.

RNP/ae

BIRD 006154

9/1/55 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

ROAN FOR RANCH ROOF

Hopper No.	%	Kind of Slate
1	60	LR 29 Coral
	20	LR 78 Gray
	20	LR 96 White
2	85	LR 96 White
	15	LR 29 Coral
3	66-2/3	LR 29 Coral
	33-1/3	LR 96 White
4	Spillover	

Cam Setting

Hopper #1 - Starts 134°, Stops 207°
Hopper #2 - Starts 68°, Stops 141°
Hopper #3 - Starts 0°, Stops 73°

Blende cycle 54", all bands 11", spillover between each band.

% Slate per Sq.

3M - #LR 96 White - - - 53.7%
3M - #LR 29 Coral - - - 41.8%
3M - #LR 78 Gray - - - 4.5%

New Specification.

RNP/ae

BIRD 006155

5/1/63 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

GRAY - #23 MASTER-BILT, 90# MINERAL

LR #55 GRAY - - - - - 100%

Supersedes Specification dated 3/1/55.

RNP/ae

5/1/63 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

SLATE BLENDS FOR #21 MASTER-BILT, #23 MASTER-BILT, #21 WIND SEAL, #23 WIND SEAL

Hopper No.	%	Kind of Slate
1	40	Glenwood Black
	60	KR5 Red
2	20	LR #76 Gray
	80	Glenwood Black
3	100	LR #76 Gray
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

KR5 Red - - - - - - - - - - - 13.5%
LR #76 Gray - - - - - - - - - 41.6%
Glenwood Black - - - - - - - 44.9%

Supersedes Specification dated 7/1/60.

"NP/ae

BIRD 006157

4/1/61

FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

WHITE - NEPONSET CAP SHEET

A701 White - - - - - 100%

Supersedes Specification dated 5/1/63

RNP/ae

BIRD 006158

5/1/63 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

BLACK - #23 M. B., #21 M. B., #23 WIND SEAL, #21 WIND SEAL, TRI TAB HEX, COPPER CLIPT, STD. IND., NEP. CAP SHEET

LR #54 Black - - - - - 100%

Supersedes Specification dated 3/1/55.

HNP/ae

BIRD 006159

5/10/66 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

COLONIAL GREEN - ALL SHINGLES AND MINERAL SURFACED ROLL GOODS

A 171 Green - 100%

Supersedes Specification dated 3/1/55.

RNP/ae

BIRD 006160

5/1/63 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

BRITE RED - ALL SHINGLES AND MINERAL SURFACED ROLL GOODS

LR #22 RED - - - - - 100%

Supersedes Specifications dated 3/1/55.

RNP/ae

BIRD 006161

5/1/63 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

BROWN - ALL SHINGLES AND ALL MINERAL SURFACED ROLL GOODS

LR #41 Brown - - - 100%

Supersedes Specifications dated 3/1/55.

RNP/ae

BIRD 006162

2/28/55 FS-PL

STANDARD SPECIFICATION

SHADE MIXTURE - #11 GRANULES

GRAY FOR ROLL SHINGLE SIDING

100% 3M #56 Silver Gray.

Supersedes Specification dated 7/19/49.

RNP/ae

BIRD 006163

2/1/67 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

DESERT BROWN - #23 M. B., #23 WIND SEAL

Hopper No.	%	Kind of Slate
1	35	A701 White
	65	LR 49 Brown
2	70	A701 White
	30	LR 49 Brown
3	10	A701 White
	90	LR 49 Brown
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

A701 White - - - - - 42.6%
LR 49 Brown - - - - 57.4%

Supersedes Specification dated 5/1/63.

RNP/ae

BIRD 006164

9/1/55 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

DESERT BROWN - TRI TAB HEX

Hopper No.	%	Kind of Slate
1	35	LR 96 White
	65	LR 49 Brown
2	70	LR 96 White
	30	LR 49 Brown
3	10	LR 96 White
	90	LR 49 Brown
4	Spillover	

Cam Setting

Hopper #1 - Starts 134°, Stops 207°
Hopper #2 - Starts 68°, Stops 141°
Hopper #3 - Starts 0°, Stops 73°
(Tri Tab Hex Cam)

Blende cycle 54", all bands 11", spillover between each band.

% Slate per Sq.

LR 96 White - - - - 42.6%
LR 49 Brown - - - - 57.4%

Supersedes specification dated 1/11/55

RNP/ae

BIRD 006165

2/1/67 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

DAWN MIST - FOR 180# STANDARD TWIN LOCK, 235# DOUBLE COVERAGE TWIN LOCK AND 155# COPPER CLIPT

Caution: This is not the same blende as the one for #23 M. B.

Hopper No.	%	Kind of Slate
1	55	LR #29 Coral
	20	LR #78 Gray
	25	A701 White
2	70	A701 White
	30	LR #29 Coral
3	66-2/3	LR #29 Coral
	33-1/3	A701 White
4	Spillover	

% Slate per Sq.

3M #78 Gray - - - - - 4.5%
3M #29 Coral - - - - -47.5%
A701 White - - - - - 48.0%

Slate Deflector Plates to be Used.

Supersedes Specification dated 5/1/63.

RNP/ae

9/1/55 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

DAWN MIST - TRI TAB HEX, ~~TWIN LOCK - STANDARD AND DOUBLE COVERAGE~~

Hopper No.	%	Kind of Slate
1	60	LR 29 Coral
	20	LR 78 Gray
	20	LR 96 White
2	85	LR 96 White
	15	LR 29 Coral
3	66-2/3	LR 29 Coral
	33-1/3	LR 96 White
4	Spillover	

Cam Setting
Hopper #1 - Starts 134°, Stops 207°
Hopper #2 - Starts 68°, Stops 141°
Hopper #3 - Starts 0°, Stops 73°
(Tri Tab Hex Cam)

Blends cycle 54", all bands 11", spillover between each band.

% Slate per Sq.

LR 78 Gray - - - - 4.5%
LR 29 Coral - - - 41.8%
LR 96 White - - - 53.7%

Slate Deflector plates to be used on both Twin Locks - not Tri Tab.

Supersedes specification dated 1/11/55.

RNP/ae

BIRD 006167

2/1/67 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

MEADOW MIST - 200# TRI TAB HEX, TWIN LOCK, 180# STANDARD, AND 235# DOUBLE COVERAGE, AND RANCH ROOF

Hopper No.	%	Kind of Slate
1	66-2/3	LR 74 Gray
	33-1/3	A701 White
2	68	A701 White
	16	LR 74 Gray
	16	LR 19 Green
3	75	LR 19 Green
	25	A701 White
4	Spillover	

Cam Setting

Hopper #1 - Starts 134°, Stops 207°
Hopper #2 - Starts 68°, Stops 141°
Hopper #3 - Starts 0°, Stops 73°
(Tri Tab Hex Cam)

Blende Cycle 54", all bands 11", spillover between each band.

% Slate per Sq.

LR 74 Gray - - - - - - 22.1%
LR 19 Green - - - - - 31.6%
A701 White - - - - - - 46.3%

Slate Deflector plates to be used on both Twin Locks - Not Tri Tab

Supersedes Specification dated 5/1/63.

RNP/as

BIRD 006168

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

DAWN MIST - 90# MINERAL

Hopper No.	%	Kind of Slate
1	60	LR #29 Coral
	20	LR #78 Gray
	20	A701 White
2	85	A701 White
	15	LR #29 Coral
3	66-2/3	LR #29 Coral
	33-1/3	A701 White
4	Spillover	

Cam Setting

Hopper #1 - Starts 134°, Stops 207°
Hopper #2 - Starts 68°, Stops 141°
Hopper #3 - Starts 0°, Stops 73°

Blends cycle 54", all bands 11", Spillover between each band.

% Slate per Sq.

A701 White - - - - - 53.7%
3M LR #39 Coral - - 41.8%
3M LR #78 Gray - - - 4.5%

Supersedes Specification "Dawn Mist - 90# Mineral" dated 11/15/55.

RNP/ae

1/15/57 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

SHADOW GREEN - FOR 90# MINERAL ONLY

IR #34 Green - - - - - 50%
IR #19 Green - - - - - 50%

To be mixed on belt and run as a tone from

#4 Hopper only.

New Specification.

RNP/ae

BIRD 006170

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

MEADOW MIST - 90# MINERAL

Hopper No.	%	Kind of Slate
1	66-2/3	LR #74 Gray
	33-1/3	A701 White
2	70	A701 White
	15	LR #74 Gray
	15	LR #19 Green
3	75	LR #19 Green
	25	A701 White
4	Spillover	

Cam Setting

Hopper #1 - Starts 134°, Stops 207°
Hopper #2 - Starts 68°, Stops 141°
Hopper #3 - Starts 0°, Stops 73°

Blender cycle 54", all bands 11", Spillover between each band.

% Slate per Sq.

LR #74 Gray - - - - - 22.1%
LR #19 Green - - - - 31.6
A701 White - - - - - 46.3

Supersedes Specification dated 11/15/55.

RNP/ae

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

WINDOW MIST - #23 M. B., #23 WIND SEAL

Hopper No.	%	Kind of Slate
1	66-2/3	LR 74 Gray
	33-1/3	A701 White
2	68	A701 White
	16	LR 74 Gray
	16	LR 19 Green
3	75	LR 19 Green
	25	A701 White
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

3M LR 74 Gray - - - - - 22.1%
3M LR 19 Green - - - - 31.6%
A701 White - - - - - - 46.3%

Supersedes Specification dated 5/1/63.

RNP/ae

BIRD 006172

1/1/55 FS-PL

STANDARD SPECIFICATION

SHADE MIXTURE - #11 GRANULES

SHADOW BLUE - #21 M. B.

Hopper No.	%	Kind of Slate
1	50	LR 86 Blue
	50	LR 8 Blue
2	20	LR 8 Blue
	80	LR 86 Blue
3	20	LR 86 Blue
	80	LR 8 Blue
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

3M - LR 8 Blue - - - - - - - - - 46.2%
3M - LR 86 Blue - - - - - - - - -53.8%

Supersedes specification dated 4-1-54.

RNP/ae

BIRD 006173

1/1/55 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

SHADOW GREEN - #21 M. B.

Hopper No.	%	Kind of Slate
1	50	LR 19 Green
	50	LR 34 Green
2	80	LR 34 Green
	20	LR 19 Green
3	85	LR 19 Green
	15	LR 34 Green
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

3M - LR 19 Green - - - - - - - 49.5%
3M - LR 34 Green - - - - - - - 50.5%

Supersedes specification dated 4/1/54.

RNP/ae

BIRD 006174

1/1/55 FS-PL

STANDARD SPECIFICATION

SHADE MIXTURE - #11 GRANULES

SHADOW GRAY - #21 M. B.

Hopper No.	%	Kind of Slate
1	50	LR 55 Gray
	50	LR 78 Gray
2	85	LR 55 Gray
	15	LR 78 Gray
3	85	LR 78 Gray
	15	LR 55 Gray
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

3 M - LR 55 Gray - - - - - - - - 53%
3 M - LR 78 Gray - - - - - - - - 47%

Supersedes specification dated 4/1/54.

RNP/ae

BIRD 006175

2/1/67 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

DAWN MIST - #23 M. B., #23 WIND SEAL

Hopper No.	%	Kind of Slate
1	60	LR 29 Coral
	20	LR 78 Gray
	20	A701 White
2	85	A701 White
	15	LR 29 Coral
3	66-2/3	LR 29 Coral
	33-1/3	A701 White
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

A701 White - - - - - 53.7%
3M LR 29 Coral - - - 41.8%
3M LR 78 Gray - - - 4.5%

Supersedes Specification dated 5/1/63.

:NP/ae

BIRD 006176

2/1/67 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

FROST BLENDE - #23 MASTER-BILT, #23 WIND SEAL

Hopper No.	%	Kind of Slate
1	50	A701 White
	25	Glenwood Black
	25	LR #76 Gray
2	80	A701 White
	20	LR #76 Gray
3	95	A701 White
	5	LR #76 Gray
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 65°

% Slate per Sq.

A701 White - - - - - 71.8%
Glenwood Black - - - 5.6%
LR #76 Gray - - - - 22.6%

Supersedes Specification dated 5/1/63.

RNP/ae

BIRD 006177

6/14/68 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

SNOW WHITE - #23 M. B., #23 Wind Seal, #23 W. S. Jets, D. C. Locks, Std. Locks, 155# Copper Clipt, Tri Tab Hex, 9" x 12" Hip & Ridge, 90# Mineral

LR #955 White - - - - 100%

Supersedes Specification dated 2/1/67.

RHP/ae

BIRD 006178

Date 5/10/47 FS-PL

STANDARD SPECIFICATIONS

Shade Mixture - #11 Granules

Russet Glo for #21 Masterbilt - 100 Squares

Hopper No.	%	Kind of Slate	Amount
1.	30	3M Brite Red	212
	70	3M Buff	493
2.	20	3M Buff	285
	80	3M Brite Red	1135
3.	40	Glen. Black	410
	60	3M Brite Red	615
4.	Spillover		

Cam Setting.

Hopper #1 - Starts 220°, stops 265°
Hopper #2 - Starts 120°, stops 210°
Hopper #3 - Starts 0°, stops 65°

% Slate per Sq.

3M Buff - 24.7
3M Brite Red - 62.3
Glen. Black - 13.0

Supersedes specification - "Shade Mixture #9 Granules - Russet Glo for #21 & #24 Masterbilt" - dated 3/6/42

RNP:lc

BIRD 006179

Date 7/11/49 FS-PL

STANDARD SPECIFICATIONS

Shade Mixture - #11 Granules

Slate Blende for Tri Tab Hex Weather-tex, Twin Lock (Double Coverage)

Hopper No.	%	Kind of Slate
1	60	Staso Red
	40	Glenwood [redacted]. Black
2	80	Glenwood [redacted]. Black
	20	Funk. Green
3	100	Funk. Green
4	Spillover	

Cam Setting
Hopper #1 - Start 220°, Stop 265°
Hopper #2 - Start 120°, Stop 210°
Hopper #3 - Start 0°, Stop 90°

% Slate per Square:

Staso Red	14.3%
Funk. Green	45.7%
Glenwood [redacted]. Black	40.0%

Order of Operation: 3-2-1

Supersedes specification titled "Slate Blende for Tri Tab Hex W-Tex, dated 2/27/42.

RNP:lc

BIRD 006180

3/1/67 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

SHADOW GREEN FOR 9" X 12" HIP AND RIDGE

Hopper No.	%	Kind of Slate
4	50	3M LR 19 Green
	50	3M LR 34 Green

New Specification.

KNP/ae

BIRD 006181

3/1/67 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

RUSSET GLO FOR 9" X 12" HIP AND RIDGE

Hopper No.	%	Kind of Slate
4	15	Glenwood Black
	25	3M LR 65 Buff
	60	3M LR 22 Red

New Specification.

RNP/ae

BIRD 006182

3/1/67 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

MEADOW MIST FOR 9" X 12" HIP AND RIDGE

Hopper No.	%	Kind of Slate
4	20	3M LR 74 Gray
	30	3M LR 19 Green
	50	A 701 White

New Specification.

RNP/ae

BIRD 006183

3/1/67 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

DAWN MIST FOR 9" X 12" HIP AND RIDGE

Hopper No.	%	Kind of Slate
4	5	3M LR 78 Gray
	45	3M LR 29 Coral
	50	A 701 White

New Specification.

RNP/ae

BIRD 006184

3/1/67 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

DESERT BROWN - 9" X 12" HIP AND RIDGE

Hopper No.	%	Kind of Slate
4	45	A 701 White
	55	LR 49 Brown

New Specification.

RNP/ae

BIRD 006185

3/1/67 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

FROST BLENDE - 9" X 12" HIP AND RIDGE

Hopper No.	%	Kind of Slate
4	70	A 701 White
	5	Glenwood Black
	25	LR 76 Gray

New Specification.

RNP/ae

BIRD 006186

3/1/50 PS-PL

STANDARD SPECIFICATIONS

Shade Mixture - #11 Granules

Russet Glo for Std. Individual and [redacted] 90# Mineral.

Hopper No.	%	Kind of Slate
1	25	3M Brite Red
	25	3M Brown
	50	3M Buff
2	15	3M Buff
	15	3M Brown
	70	3M Brite Red
3	40	3M Brown
	60	3M Brite Red
4	Spillover	

Cam Setting
Hopper #1 - Starts 220° - Stops 265°
Hopper #2 - Starts 120° - Stops 210°
Hopper #3 - Starts 0° - Stops 90°
(Tri Tab Hex Cam)

% Slate per Sq.
3M Buff - 18.0%
3M Brown - 25.4%
3M Brite Red - 56.6%

Supersedes specification "Russet Glo for Std. Ind. Hip and Ridge" dated 2/9/43.

RNP/ae

BIRD 006187

3/1/50 FS-PL

STANDARD SPECIFICATION

Shade Mixture - #11 Granules

Slate Blende for Std. Individual and 36" 90# Mineral.

Hopper No.	%	Kind of Slate
1	60	Staso Red
	25	Funk. Black
	15	Sea Green
2	30	Sea Green
	70	Funk. Black
3	70	Sea Green
	20	Funk. Black
	10	Staso Red
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 90°
(Tri Tab Hex Cam)

% Slate per Sq.

Staso Red - 16.7%
Funk Black - 39.7%
Sea Green - 43.6%

New Specification.

RNP/ae

BIRD 006188

3/1/50 FS-PL

STANDARD SPECIFICATIONS

Shade Mixture - #11 Granules

Brown Blends for Std. Individuals and 32" 90# Mineral

Hopper No.	%	Kind of Slate
1	20	3M Buff
	80	3M Brown
2	30	3M Brite Red
	70	3M Brown
3	100	3M Brown
4	Spillover	

Cam Setting

Hopper #1 - Starts 220°, Stops 265°
Hopper #2 - Starts 120°, Stops 210°
Hopper #3 - Starts 0°, Stops 90°
(Tri Tab Hex Cam)

% Slate per Sq.

3M Buff - 4.4%
3M Brite Red - 13.5%
3M Brown - 82.1%

New Specification

RNP/ae

BIRD 006189

10/29/56 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

MOUNTAIN GREEN FOR HEX BUTT

Hopper No.	%	Kind of Slate
1	33-1/3	3M LR #37 Green
	33-1/3	3M LR #8 Blue
	33-1/3	Glenwood #11 Black
2	100	3M LR #37 Green
3	60	3M LR #37 Green
	20	3M LR #22 Red
	20	Glenwood #11 Black
4	Spillover	

% Slate per Square

3M LR #22 Red - - - - - 8.0
3M LR #8 Blue - - - - - 6.7
Glenwood #11 Black - - 14.7
3M LR #37 Green - - - 70.6%

Cam Setting

Hopper #1 - Starts 0
Hopper #2 - Starts 4
Hopper #3 - Starts 8

Spacing Blocks. - Painted Blue

Hopper #1 - 16" Block in center, 5" opening each end, Blocks to end.
Hopper #2 - 8" Block in center, 5" opening each side, Blocks to end.
Hopper #3 - 10" opening, Blocks to end.

Supersedes Specification dated 3/14/56

RNP/ae

BIRD 006190

3/1/50 FS-PL

STANDARD SPECIFICATIONS

Shade Mixture - #11 Granules

Old Colony Buff for Roll Bric Siding

Hopper No.	%	Kind of Slate
4	20	3M Brite Red
	80	3M #67 Cream

New Specification.

RNP/ae

BIRD 006191

7/19/49 FS-PL

STANDARD SPECIFICATIONS

Shade Mixture - #11 Granules

Red for Roll Bric Siding

100% 3M #22 Red

New Specification.

BIRD 006192

7/19/49 FS-PL

STANDARD SPECIFICATIONS

Shade Mixture - #11 Granules

Gray for Roll Shingle Siding.

100% ~~3M #95 White~~

LR #30 SHADE [illegible]

New specification.

2/5/55 FS-PL

STANDARD SPECIFICATIONS

SHADE MIXTURE - #11 GRANULES

PLANTATION GREEN - ROLL SHINGLE SIDING

Hopper No.	%	Kind of Slate
4	60	LR #56 Silver Grey
	40	LR #19 Green

New Specification.

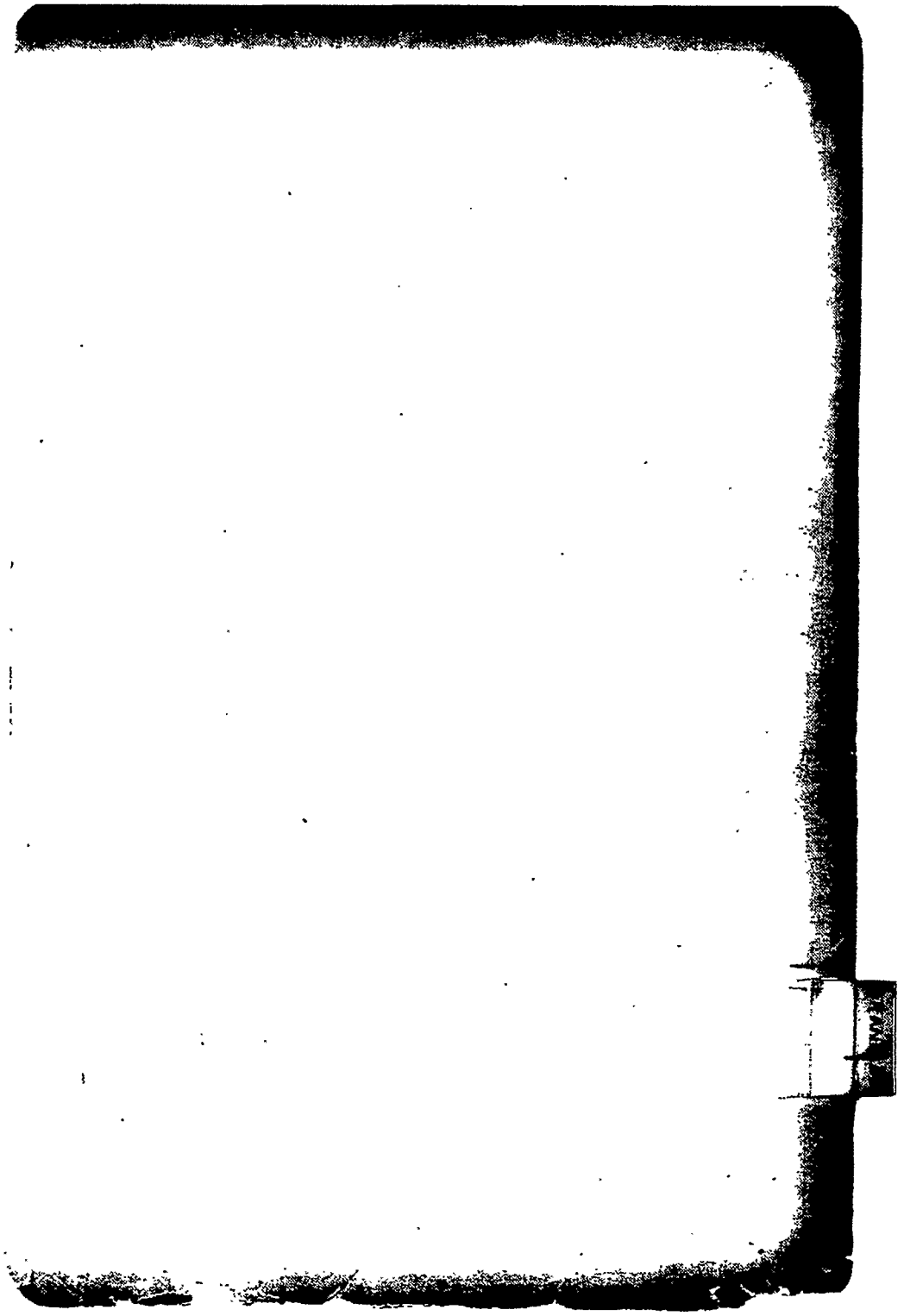
RNP/ae

BIRD 006194

CAPACITY - SLATE BINS

	# Per Bin	# Per Inch
1. Dura #11	196,860	1,020
2. Green #11	179,910	900
3. Colonial #9	199,112	1,031
4. Asst. Black	177,288	830
5. Brite Red #11	196,860	1,020
6. Black - F. #11	193,281	1,000
7. Brite Red #9	176,074	912
8. Buff #9	199,112	1,031
9. Black - F. #9	188,006	974
10. Blue #11	183,720	930
11. Dura #11	182,198	944
12. Green #9	203,912	1,056
13. Buff #11	189,666	983
14. Red #11	185,350	900
15. Red #9	186,352	883

16 Ft. Long x 193" Deep.



1-1-71 FS-PL

STANDARD SPECIFICATIONS
FG GRANULES - #11
STANDARD RECOVERY

MATERIAL	STD. PER TON	%
Shale	3835.0	99.57
Slate Oil	16.5	.43
Total Gross	3851.5	100.00
Slate Recovery	2000.0	52.15
Filler and Fines Recovery	633.0	16.51
Waste	1202.0	31.34
Total Recovery (Granules, Filler, Fines)		68.66

Production Per Hour --- 25.0 Tons

Supercedes specification dated 1-1-68

BIRD 006197

10/18/38 FS PL

RAW MATERIAL SPECIFICATIONS

Paraffine Oil.

Use: To be used for Oiling Slate Granules. This oil to be lightest possible color. It shall conform with the following points:

1. Sp. Gr. - at 60° shall be 28.0 36.0 Be.
2. Flash Pt. - Min. - 360°F(C.O.C.)
3. Fire Pt. - Mine.- 405°F.(C.O.C.)
4. Viscosity - (Engler 100 cc@ 122°F) 1.75 to 2.25
5. Volatility - 2.0% Max.(ASTM D-6-20)

Failure to meet the above specifications forms a basis for adjustment and the material is subject to rejection.

Issued 10/18/38

RW?jt

BIRD 006198

Date 12/10/47 FS PL

RAW MATERIAL SPECIFICATIONS

Artificially Colored Surfacings
#11 - All Colors of Colorquartz.

Colonial Green	- 3M #LR 37 Green
Brite Red	- 3M #LR 22 Red
Buff	- 3M #LR 63 Buff
Brown	- 3M #LR 41 Brown
Blue	- 3M #8 Blue
Cream	- 3M #67 Cream (Roll Bric only)

This must be a clean, uniformly colored granule equal in color to standard sample submitted. All granules must be thoroughly covered with the coloring and no granules shall show uncolored spots.

% Moisture - 0.5% Max.
It shall conform to the following grading specifications:

Tyler Standard Screens	PERCENT Min.	Std.	Max.
Retained on 10 mesh screen	0	0	2.0
" " 14 " "	38.0	43.0	48.0
" " 20 " "	30.5	35.5	40.5
" " 28 " "	17.0	19.0	25.0
" " 35 " "	2.0	2.5	4.0
" " 65 " "	0.0	0.0	0.0
" " 100 " "	0.0	0.0	0.0

It shall be uniform in color. No shipment shall show a wide variation from the above specifications. Failure to meet any of the above specifications forms a basis for adjustment and is subject to rejection.

To be uniformly oiled with 1 gallon #1 Paraffine oil per ton.

Supersedes specification dated 3/10/42.

RNPLc

BIRD 006199

5/1/71 STANDARD SPECIFICATIONS FS-PL

TYPE 15 PERFORATED ASPHALT SATURATED ASBESTOS FELT

NOTE: Run of FSPM-3 - 432 Sq. Ft. per roll.

RAW MATERIALS PER ROLL	NET	GROSS	NET PER 100 SQ. FT.
Asbestos Felt - 10# x 36"	41.0	43.5	9.49
Saturation - #11 Flux (45.8%)	18.8	19.6	4.35
Net Wt.	59.8		
Finishing Materials	0.1		
Shipping Wt.	59.9		

Variation in Shipping Wt. - Min. 56# Max. 64#

Guide Lines - 2", 8-1/2", 11-1/4", 17", 19", 24-3/4", 27-1/2", 34" from each edge. To be Aluminum lines put on by supplier.

Length of Roll - 144'-0". No extra allowance for two piece rolls. All two piece rolls must bear label stating roll is two piece.

FINISHING MATERIALS: --1-6"x36" plain Kraft wrapper stencilled "Bird #15 Asbestos Perforated Asphalt Felt." Fuller's #3188 Adhesive - 0.05#/Roll Min. Saturation - 40%; Min. Dry Felt Wt. - 8.5#/100 Sq. Ft.

RCD PRODUCTION RATE: -- 125 Rolls per hour.

New Specification.

RNP/ew

BIRD 006200

5-15-72 STANDARD SPECIFICATIONS FS-PL

TYPE 15 ASPHALT SATURATED ASBESTOS FELT

NOTE: Run on FSPM-3 - 324 Sq. Ft. per roll.

RAW MATERIALS PER ROLL	NET	GROSS	NET PER 100 SQ. FTT.
Asbestos Felt - 10# x 36"	30.7	32.5	9.49
Saturation - #11 Flux (45.8%)	14.1	14.7	4.35
Net Wt.	44.6		
Finishing Materials	0.1		
Shipping Wt.	44.7		

Variation in Shipping Wt. - Min. 42.1# Max. 47.3#

Guide Lines - 2", 8-1/2", 11-1/4", 17", 19", 24-3/4", 27-1/2", 34" from each edge. To be Aluminum lines put on by supplier.

Length of Roll - 108'-0". No extra allowance for two piece rolls. All two piece rolls must bear label stating roll is two piece.

FINISHING MATERIALS: Fuller's #3188 Adhesive - 0.05#/Roll

Min. Saturation - 40%; Min. Dry Felt Wt. - 8.5#/100 Sq. Ft.

1 - 6" x 36" Printed Kraft Wrapper - Lt. Blue

RCD PRODUCTION RATE: --- 175 Rolls per hour.

1 - Type 15 B. U. Label printed on wrapper.

New Specification. NOTE: SPECIAL RUN MATERIAL.

BIRD 006201

3/1/69 FS-PL

STANDARD SPECIFICATIONS

TYPE 15 ASPHALT FELT - PLAIN AND PERFORATED

324 SQ. FT. PER ROLL

NOTE: Material run on FSPM-3

RAW MATERIALS PER ROLL	NET	GROSS	NET PER 100 SQ. FT.
Felt - 27 Lb. x 36"	18.1	20.2	5.6
Saturation-#11 Flux - 146%	26.6	27.4	8.2
Net Wt.	44.7		
Finishing Materials	.1		
Shipping Wt.	44.8		

Variation in Shipping Wt. - 42.0# Min.
48.0# Max.

Guide Lines: 2", 8-1/2", 11-1/4", 17", 19", 24-3/4", 27", 34" from each edge. To be aluminum lines and applied onto dry felt on DSPM-1.

Length of Rolls - 108'0".

No extra allowance for two piece rolls.

All two piece rolls must bear label stating that roll is two piece.

Finishing Material:

1 - 6" x 36" Yellow Kraft Paper with Red printing.

H. B. Fuller No. 3188 Adhesive -.0015#

No Underwriter Label.

Wt. of sheet per 100 Sq. Ft. - 13.0# Min.

RCD Production per Hour - 325 Rolls.

New Specification.

RNP/ae

BIRD 006202

1/1/66 FS-PL

STANDARD SPECIFICATIONS

3/4 LB. DEADENING FELT

36" Wide, 50 Sq. Yds. per Roll (450 Sq. Ft.)

Run on FSPM-3

MATERIALS PER ROLL	NET	GROSS
Felt 35 Lb. x 35-7/8"	34.8	36.9
Net Wt.	34.8	
Finishing Materials	.1	
Shipping Wt.	34.9	

Minimum Wt. - 33.0#
Maximum Wt. - 37.0#
Length of Roll - 150 Ft.
No piece under 20 ft. in length in two piece rolls.

Finishing Materials
1 - Plain Wrapper, 50# Kraft, 35-3/4" x 38"
1 - Label, 2 Color - 6-1/2" x 12-1/4"

Production per Hour: 120 Rolls.

Supersedes Specification dated 1/15/61.

RNPae

BIRD 006203

1/1/66 FS-PL

STANDARD SPECIFICATIONS

1 LB. DEADENING FELT

36" Wide, 50 Sq. Yds. per Roll (450 Sq. Ft.)

Run on FSPM-3

RAW MATERIALS PER ROLL	NET	GROSS
Felt - 50 Lb. x 35-7/8"	49.6	52.6
Net Weight	49.6	
Finishing Materials	.1	
Shipping Wt.	49.7	

Minimum Wt. - 48.0#
Maximum Wt. - 52.0#
Length of Roll - 150 Ft.
No piece under 20 ft. in length on two piece rolls.

Finishing Materials
1 - Plain Wrapper, 50# Kraft, 35-3/4" x 42"
1 - Label, 2 Color - 6-1/2" x 12-1/4"

Production per Hour: 120 Rolls per hour.

Supersedes Specification dated 1/16/61.

RNP/ae

BIRD 006204

6/1/68 FS-PL

STANDARD SPECIFICATIONS
BIRD NO. 33 COATED FELT - 36" WIDE
32.5# PER 108 SQ. FT. - 65# PER 216 SQ. FT.
TO BE RUN AS 2 SQ. MATERIAL - 216 SQ. FT.

RAW MATERIALS PER ROLL	NET	GROSS	NET WT. PER 100 SQ. FT.
Felt 27# x 36"	12.1	13.6	5.6
Saturant - 150%	18.1	18.6	8.4
Coating - #21-1/2	14.0	14.4	6.5
Filler - 45%	11.7	12.3	5.4
Surfacing - #36 EMG Talc	9.1	10.1	4.2
Net Wt.	65.0		
Finishing Materials	0.1		
Shipping Wt.	65.1		

Finishing Materials:
Printed Wrapper - 35-1/2" x 36". Color coded Black on Tan.

No Underwriters' Label.
No Fixtures.
White Paint Lines 2", 8-1/2", 11-1/4", 17", 19", 24-3/4", 27-1/2" and 34" from each edge.
Length of Rolls - 72'-0".
No extra allowance for two piece rolls.
Two piece rolls to have a red flag at lap of two pieces.
Wt. of Sheet per 100 Sq. Ft. - 30.1#.
RDC Production Rate - 300 Rolls

NOTE: Coating to be equally distributed front and back.

Supersedes Specification dated 3/1/68.

RNP/ae