

MATERIAL

PLANT

STATE SURFACED
#007 AMERICAN COLONIAL SHINGLES
(CLARKSBURG TRACTORY)

PAGE NO.

ASBESTOS SHINGLE

DEPT.

1

1X

COLORS: Red Blend
Green Blend
Black Blend
Brown Blend
Weathered Green Blend
Touraine Red Blend

CANCELLED

3/30/51

PLAINTIFF'S
EXHIBIT
JM-2456

2X

FORMULAE:1. BASE MIX - BATCH DETAILS

PURCH. SPEC. NO.	RAW MATERIALS	BATCH QUANTITIES	
		\$	LES.
-----	60-20 Asbestos Fibre	19.8	300 3-100 lb. Bags
61061	Dark Colored Portland Cement	30.9	470 Weighed
61279	Mivalco Silica Flour	19.8	300 Weighed
-----	Ground Shingle Scrap (Air Cured)	29.5	450 4 1/2-100 lb. Bags
		100.0	1520

3X

Raw materials for one batch, as shown above, are charged, by means of screw feed hoppers and bucket elevator, into the first of a series of four mixers. The entire batch is pre-mixed in the first mixer and then discharged by gravity into the second mixer. Stock passes by gravity continuously and with continuous mixing through the second, third, and fourth mixer and then to the shingle machine.

- Notes: A. Cement and Silica are handled in bulk and batch quantities are weighed by the automatic scale used in conjunction with the bulk handling equipment. When bulk material is not available or when mechanical difficulties prohibit the use of bulk material, bagged cement and silica may be used.
- B. Ground Shingle Scrap (Air Cured only) is added on the basis that six full shovels will weigh 100 lbs. When bagged scrap is used, it is added on the basis that net weight is 100 lbs. per bag. Quantity of scrap may be varied from that shown but variations should be uniform and gradual. Total scrap used should not exceed 30% of the total batch weight.
- C. If a normal supply of shingle scrap is unavailable, a low cost mineral filler may be substituted for a portion of the scrap. Present approved fillers are "Z" Grade Marble from the Georgia Marble Co. and various #11 Grading Roofing Granules now in use at this Plant. The use of fillers as a substitute for scrap is restricted to a maximum of 22% of the weight of the scrap in the batch listed in this specification. 100 lbs. of the filler should be used and added to the batch with the scrap.

MT-000395

RECEIVED

JUN 1 1950

X- INDICATES CHANGE - REASON:

AUTHORITY FOR CHANGE

FILE HOLDERS

PLANT
MGR.IND.
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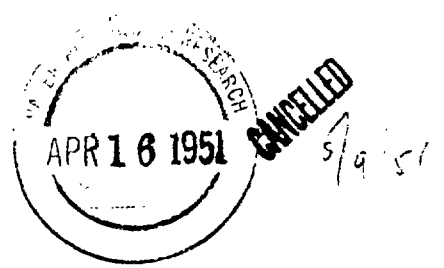
SUPERSEDES: Same Specification, Page 1, Issued 2-25-49 and Notices Of
Distribution #007 & #12.

DATE ISSU

5-19-51

RETURN TO
J-M RESEARCH
FILE ROOM

COLORS:
 Red Blend
 Green Blend
 Black Blend
 Brown Blend
 Weathered Green Blend
 Touraine Red Blend



IX

FORMULARY:

1. BASE MIX - BATCH DETAILS

SPEC. NO.	RAW MATERIALS	BATCH QUANTITIES	
		CS.	IDS.
	60-80 Asbestos Fibre	19.1	300 3-100 Lb. Bags
61061	Dark Colored Portland Cement	29.9	470 Weighed
61279	Hivalco Silice Flour	19.1	300 Weighed
	Ground Shingle Scrap (Air Cured)	21.2	500 4 1/2-100 Lb. Lots
		100.0	1570

Raw materials for one batch, as shown above, are charged, by means of screw feed hoppers and bucket elevator, into the first of a series of four mixers. The entire batch is pre-mixed in the first mixer and then discharged by gravity into the second mixer. Stock passes by gravity continuously and with continuous mixing through the second, third, and fourth mixer and then to the shingle machine.

- Notes:
1. Cement and Silice are handled in bulk and batch quantities are weighed by the automatic scale used in conjunction with the bulk handling equipment. When bulk material is not available or when mechanical difficulties prohibit the use of bulk material, bagged cement and silice may be used.
 2. Ground Shingle Scrap (Air Cured only) is added on the basis that six full shovels will weigh 100 lbs. When bagged scrap is used, it is added on the basis that net weight is 100 lbs. per bag. Quantity of scrap may be varied from that shown but variations should be uniform and gradual. Total scrap used should not exceed 32% of the total batch weight.
 3. If a normal supply of shingle scrap is unavailable, a low cost mineral filler may be substituted for a portion of the scrap. Recent approved fillers are Minnesota Mining Co. IR-40 High Gypsum and various #11 Grading Roofing Granules now in use at this Plant. The use of fillers as a substitute for scrap is restricted to a maximum of 32% of the weight of the scrap in the batch listed in this specification.

MT-000394

APR 16 1951

IX - Change base mix formula.
 X - INDICATES REASON: CHANGE
 2X - Show maximum usage of approved fillers.
 AUTHORITY - IX & 2X - Product Proposal Memo 44-63 & H. R. Gaudin's letter 1-15-51.
 FOR CHANGE

FILE-HOLDERS		PLANT MGR.	IND. ENG.	SUPR. QUAL. CONTROL	PROD. SUPT.	PLANT FINANCE OFFICE	RESEARCH LAB.	MGR. QUAL. CONTROL	J. QU CON
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SUPERSEDES: Same Specification, Page 1, dated 5-12-50 and revision of Division No. 1-1, dated 1-16-51.

DATE ISSUED
 3-30-51

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 FILE ROOM

2X

COLOURS:
 Red Blend
 Green Blend
 Black Blend
 Brown Blend
 Weathered Green Blend
 Touraine Red Blend



CANCELLED

5/16/51

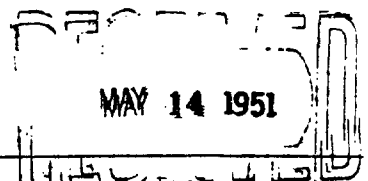
FORMULAS:

1. BASE MIX - BATCH DETAILS

PUNCH. SPEC. NO.	RAW MATERIALS	BATCH QUANTITIES	
		PER 100.0	IPS.
	60-20 Asbestos Fibre	19.1	300 3-100 lb. Bags
61061	Dark Colored Portland Cement	29.9	470 Weighed
61279	Mivalco Silica Flour	19.1	300 Weighed
	Ground Shingle Scrap (Air Cured)	21.9	500 5-100 lb. Lots
		100.0	1570

Raw materials for one batch, as shown above, are charged, by means of screw feed hoppers and bucket elevator, into the first of a series of four mixers. The entire batch is pre-mixed in the first mixer and then discharged by gravity into the second mixer. Stock pastes by gravity continuously and with continuous mixing through the second, third, and fourth mixer and then to the shingle machine.

- Notes: A. Cement and Silica are handled in bulk and batch quantities are weighed by the automatic scale used in conjunction with the bulk handling equipment. When bulk material is not available or when mechanical difficulties prohibit the use of bulk material, bagged cement and silica may be used.
- B. Ground Shingle Scrap (Air Cured only) is added on the basis that six full shovels will weigh 100 lbs. When bagged scrap is used, it is added on the basis that net weight is 100 lbs. per bag. Quantity of scrap may be varied from that shown but variations should be uniform and gradual. Total scrap used should not exceed 32% of the total batch weight.
- C. If a normal supply of shingle scrap is unavailable, a low cost mineral filler may be substituted for a portion of the scrap. Present approved fillers are Minnesota Mining Co. L3-40 Mesh Geystone and various #11 Grading Roofing Granules now in use at this Plant. The use of fillers as a substitute for scrap is restricted to a maximum of 10% of the weight of the scrap in the batch listed in this specification.



X- INDICATES REASON:
 CHANGE

Change from 4 1/2 to 5-100 lb. lots.

E. R. WILLIAMS

AUTHORITY FOR CHANGE
 Correction.

FILE-HOLDERS		PLANT MGR.	ED. MGR.	SUPR. QUAL. CONTROL	PROD. SUPT.	PLANT FINANCE OFFICE	RESEARCH LAB.	MGR. QUAL. CONTROL	DI QU CON
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SUPERSEDES: Same Specification, Page 1, Issued 3-20-51.

MT-000393

DATE ISSU

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FORMULA:

1. BASE MIX - BATCH DETAILS

PURCH.		BATCH QUANTITIES	
SPEC. NO.	RAW MATERIALS	QTY.	WTS.
	60-20 Asbestos Filler	19.1	300 3-100 Lb. Bags
61061	Dark Colored Portland Cement	29.9	470 Weighed
61279	Wyalapa Silica Flour	19.1	300 Weighed
	Ground Shingle Scrap (Air Cured)	31.9	500 5-100 Lb. Lots
		100.0	1570

Raw materials for one batch, as shown above, are charged, by means of screw feed hoppers and bucket elevator, into the first of a series of four mixers. The entire batch is pre-mixed in the first mixer and then discharged by gravity into the second mixer. Stock passes by gravity continuously and with continuous mixing through the second, third, and fourth mixer and then to the shingle machine.

Notes: A. Cement and Silica are handled in bulk and batch quantities are weighed by the automatic scale used in conjunction with the bulk handling equipment. When bulk material is not available or when mechanical difficulties prohibit the use of bulk material, bagged cement and silica may be used.

B. Ground Shingle Scrap (Air Cured only) is added on the basis that six full shovels will weigh 100 lbs. When bagged scrap is used, it is added on the basis that net weight is 100 lbs. per bag. Quantity of scrap may be varied from that shown but variations should be uniform and gradual. Total scrap used should not exceed 32% of the total batch weight.

C. If a normal supply of shingle scrap is unavailable, the following alternate materials may be substituted for a portion of the shingle scrap:

1st. Alternate -- Ground Transite Pipe Scrap in amounts up to a maximum of 50% of the batch quantity of shingle scrap.

2nd. Alternate -- Minnesota Mining IR-40 Mesh Geystone or various #11 Grading Roofing Gravelles (now in use at this Plant) in amounts up to a maximum of 10% of the batch quantity of shingle scrap.

MT-000392

MAY 21 1951

X- INDICATES - REASON:
CHANGE

Show use of Ground Transite Pipe Scrap as partial substitute for shingle scrap.

AUTHORITY -
FOR CHANGE

Verbal approval C. B. Barnett at Marroco 5-3-51.

FILE-HOLDERS

PLANT
MGR.

IND.
ENG.

SUPR.
QUAL.
CONTROL

PROD.
SUPT.

PLANT
FINANCE
OFFICE

RESEARCH
LAB.

MGR.
QUAL.
CONTROL

DI.
QU.
CON.

SUPERSEDES:

Same Specification, Page 1, Revised 5-4-51 and Notice of Revision No. 1-51 dated 5-14-51.

DATE ISSU

5-16-51

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