

Johns-Manville  
FIBERIZING  
SPECIFICATION

PRODUCT:

Colorbestos Sidewall Shingles  
100, (except Dover White),  
300 Series & 339 Clapboard

PLANT & DIV.

✓  
PP. Waukegan

SPEC NO.

423-2.22

PAGE NO.

1 of 1

PLAINTIFF'S  
EXHIBIT  
JM-2436

Formulas:

"B" Type

CANCELLED

|   |         | Formula No.                          | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    |
|---|---------|--------------------------------------|------|------|------|------|------|------|------|------|
|   |         | 6D20 Fibre *                         | 300  | 300  | 300  | 300  | 300  | 300  | 300  | 300  |
| X | PS 1061 | Portland Cement,<br>Type I, Standard | 501  | 501  | 501  | 501  | 501  | 501  | 501  | 501  |
|   | PS 1281 | J-M Spec. Silica Flour               | 333  | 333  | 333  | 333  | 333  | 333  | 333  | 333  |
|   |         | Shingle Scrap (Notes<br>1, 2)        | 550  | 525  | 500  | 475  | 450  | 425  | 400  | 375  |
|   |         | Min. Batch Weight                    | 1684 | 1659 | 1634 | 1609 | 1584 | 1559 | 1534 | 1509 |
|   |         | Other Scraps (Note 3)                | 100  | 125  | 150  | 175  | 200  | 225  | 250  | 275  |

NOTES:

- 1: (a) Shingle Scrap should be blended 1 part normal cured to 2 parts steam cured.  
From 0 to 100 lbs. of the Shingle Scrap may be replaced by any of the following approved Mineral Fillers: Mastic Filler, Limestone Dust, Limestone Aggregate, Ground Trap Rock, Greystone and Transite Pipe Scrap & Rock Wool Shot.  
When surplus fibre is used in the base furnish of 100 Series Shgls., an additional 104% (total of 204%) of Dolomite may be used to replace Shingle Scrap.  
(b) Rock Wool Shot must be introduced at the Shingle Scrap grinders and must be evenly distributed throughout the scrap.
- 2: At Waukegan Plant, when the Fiberizer is in operation, an additional 100% of Shingle Scrap may be added to the above formulas.
- 3: (a) Wet Machine Scrap, Corrugated Transite Scrap or Transite Pipe Scrap may be added to the formula above up to the amounts shown.  
(b) Also up to 75% of material from the Dust Collectors and/or 75% of Machine Drop from the same or other machines producing similar stock may be added to the above formulas.

Caution: The use of scrap should be planned so that it will not be necessary to shift more than two successive formulas at any time. Violent shifts should not be made.

RETURN TO  
J-M RESEARCH  
FILE ROOM

X- INDICATES CHANGE — REASON: X - Show correct nomenclature & add P.S. numbers  
XX - Remove reference to 6DAX-2498 Fibre

AUTHORITY X - Current Purch. Specs.  
FOR CHANGE XX - L.L. Liggett's letter, 10-9-57

SUPERSEDES: Page 1 of 423-2.12 Issued 6-30-58

MT-000264

|              |              |               |                |               |              |              |                  |      |         |                |            |
|--------------|--------------|---------------|----------------|---------------|--------------|--------------|------------------|------|---------|----------------|------------|
| DIR.<br>Q.C. | MGR.<br>Q.C. | SUPR.<br>Q.C. | PROD.<br>SUPT. | PLNT.<br>FIN. | RES.<br>LAB. | Ind.<br>Eng. | Transp.<br>Supv. | Lab. | Foreman | DATE<br>ISSUED | NOV 5 1959 |
|--------------|--------------|---------------|----------------|---------------|--------------|--------------|------------------|------|---------|----------------|------------|

|                                |                                                                                            |          |          |
|--------------------------------|--------------------------------------------------------------------------------------------|----------|----------|
| MANUFACTURING<br>SPECIFICATION | Colombestos Sidewall Shingles<br>100, (except Dover White),<br>300 Series & 359 Cleopboard | SPEC NO. | 423-2.22 |
|                                |                                                                                            | PAGE NO. | 1 of 1   |

Formulas: "B" Type

CANCELLED

|           | Formula No.                          | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    |
|-----------|--------------------------------------|------|------|------|------|------|------|------|------|
|           | 6D20 Fibre                           | 300  | 300  | 300  | 300  | 300  | 300  | 300  | 300  |
| X PS 1061 | Portland Cement,<br>Type I, Standard | 452  | 452  | 452  | 452  | 452  | 452  | 452  | 452  |
| IX        | J-M Bulk Silica Flour                | 382  | 382  | 382  | 382  | 382  | 382  | 382  | 332  |
|           | Shingle Scrap (Notes<br>1, 2)        | 550  | 525  | 500  | 475  | 450  | 425  | 400  | 375  |
|           | Min. Batch Weight                    | 1684 | 1659 | 1634 | 1609 | 1584 | 1559 | 1534 | 1509 |
|           | Other Scraps (Note 3)                | 100  | 125  | 150  | 175  | 200  | 225  | 250  | 275  |

**NOTES:**

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X- INDICATES —REASON: X-Show Silica to Cement ratio 0.85  
CHANGE 1X-Show use of bulk Silica Flour  
AUTHORITY X-PP-Res-423-86; Prod. Line Chg. 041-34-60 enacted 10-24-60  
FOR CHANGE 1X-Correction

SUPERSEDES: Page 1 of same spec. Issued 11-5-59

MT-000263

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J-M RESEARCH  
FILE ROOM

|              |               |               |                |               |               |                |               |         |                |          |
|--------------|---------------|---------------|----------------|---------------|---------------|----------------|---------------|---------|----------------|----------|
| DIR.<br>O.C. | ENGR.<br>O.C. | SUPR.<br>O.C. | PROD.<br>SUPT. | PLANT<br>FIN. | IND.<br>ENGR. | TRNG.<br>SUPT. | LAB.<br>ENGR. | FORWARD | DATE<br>ISSUED | 10-26-60 |
|--------------|---------------|---------------|----------------|---------------|---------------|----------------|---------------|---------|----------------|----------|

