PLAINTIFF'S EXHIBIT CSR-599

Title: EVALUATION OF ASBESTOS FIBERS USED IN TRANSITE PIPE

C O N F I D E N T I A L

SUMMARY

The purpose of this investigation was to determine the drainage-filtration time for asbestos fibers and the relative unit strengths and densities of sag cakes made with these asbestos fibers currently used in the manufacture of Transite pipe. For a given percentage of fiber in the furnish, a given consistency, and a constant forming pressure, the relative strengths of the sag cakes and the drainage-filtration times for the fibers are given below:

Relative Strengths - C&G3 = 100%

25% Fiber in Furnish

Fiber	Unit Strength psi	Percent of Maximum Strength
C+G3	4260	100
4T28	4050	95.3
Cleaned 6D20	4050	95.3
Normandie 4T	3560	83.5
5R21	3520	82.8
6D20	3450	81.1
Munro 4Y	3330	78.3
Rhodesian S	3200	75.3
Scrap	1740	40.8

Relative Drainage Filtration Rates C&3 = 100%

6 gm Fiber per 2110 cc Water

Fiber	Drainage Filtration Time, sec.	Percent of Maximum 1/Drainage Filtration Time
Scrap	32	285.0
C+G3	91	100.0
Normandie 4T	115	79.0
Munro 4Y	120	75.8
Rhodesian S	215	42.4
4T28	350	26.0
Cleaned 6D20	400	22.7
5R21	570	16.0
6D20	635	14.4

Relative Strengths of Blue Fibers

MS Blue = 100%

25% Fiber in Furnish

Fiber	Unit Strength psi	Percent of Maximum Strength
MS Blue	3700	100
Australian Blue	3500	94.5
Norca Blue	2530	68.4

Relative Drainage Filtration Rates of Blue Fibers - MS Blue = 100%

6 gm Fiber per 2110 cc Water

Fiber	Drainage Filtration Time, sec.	Percent of Maximum 1/Drainage Filtration Time
Norca Blue	62	176.0
Australian Blue	91	120.0
MS Blue	109	100.0

The strengths were determined from sag cakes made with fibers obtained from the Manville plant in 1957. The strengths given are the average value of ten samples for each condition, and the dry ingredients for each group of samples were "batch" mixed in the Readco Mixer. A randomized procedure was followed in making all samples. The results on the blue fibers were separated from those of the other fibers because of the "bulking" characteristics of the blue fibers and the considerably lower densities and effect on strength that result.

The values obtained in this investigation agree in general with those presented in Task Force Report No. 12 and No. 83. Particular note should be made of the low strength of Norca Blue fiber, and it is suggested that the use of this fiber be curtailed if a sufficient supply of MS Blue or Australian Blue fiber is available. The values presented in this report should in no way be construed as representing absolute values; rather, they indicate the relative variance that may be expected in using these fibers.

Contents: Summary, Discussion, Appendices.

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