FIRE PREVENTION TECHNOLOGIES INC

Fort Worth, Texas 76106

FPT

Standard Test Method ASTM D3806
SPECIMENS 3mm Clear Plastic Panel
Three coats Flame Safe Fire Poly FPCC applied at 250 sq. ft /gallon (final coverage rate 83.33 sq.ft / gallon)

CALCULATION:

Calculate the experimental flame-spread rating using the following equation (ASTM D3806 Test Method):

$$F_{SE} = \frac{(L_s - L_a)}{L_R - L_a} \ X \ F_{SR}$$

where:

F_{SE} = flame spread of specimen,

L_S = mean of three flame advance readings of specimen, inches, (10, 10.50, 9.50) = 10.

L_a = mean of three flame advance reading of zero flame-spread standard, inches, (8.5, 8.5,8.5) = 8.5 (Cement Board)

L_R = mean of three flame advance readings of rated standard, inches, (16.5,16.5, 16.5) = 16.5 (Red Oak) and

F_{SR} = flame-spread rating of rated standard =100

To Calculate Projected ASTM E84 Flame Spread Rating (based on the ASTM D3806 Test Method) use the following equation:

F_{SE} + 4.8 x .95 = FS_{84} (Round to Nearest Whole Number)

$$F_{SE =} \frac{(10-8.5)}{16.5 - 8.5} = \frac{1.5}{8} \ X \ 100 = 18.75 + 4.8 \ X \ .95 \ = 22.37 \text{ Round to nearest whole number}$$

Predicted   E84 Flame Spread is 22

Project number: 100118-1