

Subject 2775

August 25, 2017

SUMMARY OF TOPICS

The following topics for the Standard for Fixed Condensed Aerosol Extinguishing System Units, UL 2775, are being recirculated:

1. Revisions to Aging Test

COMMENTS DUE: SEPTEMBER 25, 2017

For your convenience in review, proposed additions to the previously proposed requirements dated 2017-06-15 are shown underlined and proposed deletions are shown ~~lined-out~~.

1. Revisions to Aging Test

RATIONALE

Responses to comments have been posted within the 2775 Proposal Review Work Area dated 2017-06-15.

PROPOSAL

55.2 The aging duration as a function of the aging temperature and useful life is given by the following formula.

$$t = A \cdot e^{-k \cdot T}$$

where:

t = Aging duration in days; $t \geq 25$ days

T = Aging temperature in °C; $T \geq 70^\circ\text{C}$

$k = 0.1 \ln(2) \approx 0.069315$

A = Constant and is a function of the useful life as specified in Table 55.1.

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Table 55.1

Useful life, years	Constant, A
10	40,895
15	59,325
20	77,755
25	96,175

Following are selected values based on the above equation.

Aging temperature, T (°C)	Aging duration, t (days), as a function of useful life			
	10 years	15 years	20 years	25 years
70	320	464 –	608 –	752 –
75	<u>226</u> 225	328	<u>430</u> –	<u>532</u> –
80	160	232	304	375
85	113	164	215	266
90	80	116	152	188
95	56	82	107	133
100	40	58	76	94
105	28	41	54	66
110	[a]	29	38	47
115	[a]	[a]	27	33

[a] Aging duration for the indicated aging temperature is less than permitted; $t \geq 25$ days

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