

§ 84.103

42 CFR Ch. I (10-1-06 Edition)

breathing gas, and then a one-quarter full charge of liquefied breathing gas.

(d) The test will be repeated with the wearer lying on each side and on his back.

(e) The oxygen content of the gas supplied to the wearer by the apparatus will be continuously measured.

§ 84.103 Man tests; performance requirements.

(a) The apparatus shall satisfy the respiratory requirements of the wearer for the classified service time.

(b) Fogging of the eyepiece shall not obscure the wearer's vision, and the wearer shall not experience undue discomfort because of fit or other characteristics of the apparatus.

(c) When the ambient temperature during testing is 24 ± 6 °C. (75 ± 10 °F.), the maximum temperature of inspired air recorded during man tests shall not exceed the following, after correction for deviation from 24 °C. (75 °F.):

Where service life of apparatus is—	Where percent relative humidity of inspired air is—	Maximum permissible temperature of inspired air shall not exceed—	
		°F.	°C.
¼ hour or less	0-100	135	57
¼ hour to ¾ hour	0-50	125	52
	50-100	¹ 110	¹ 43
1 to 2 hours	0-50	115	46
	50-100	¹ 105	¹ 41
3 hours	0-50	110	43
	50-100	¹ 100	¹ 38
4 hours	0-50	105	41
	50-100	¹ 95	¹ 35

¹ Where percent relative humidity is 50-100 and apparatus is designed for escape only, these maximum permissible temperatures will be increased by 5 °C (10 °F).

§ 84.104 Gas tightness test; minimum requirements.

(a) Each apparatus will be tested for tightness by persons wearing it in an atmosphere of 1,000 p.p.m. isoamyl acetate.

(b) Six persons will each wear the apparatus in the test concentrations specified in paragraph (a) of this section for 2 minutes and none shall detect the odor or taste of the test vapor.

TABLES TO SUBPART H OF PART 84

TABLE 1—DURATION AND SEQUENCE OF SPECIFIC ACTIVITIES FOR TEST 1, IN MINUTES
[42 CFR part 84, subpart H]

Activity	Service time—							
	3 min-utes	5 min-utes	10 min-utes	15 min-utes	30 min-utes	45 min-utes	1 hour	2, 3, and 4 hours
Sampling and readings	2	2	2	2	Perform 1 hour test 2, 3, or 4 times respectively.
Walks at 4.8 km. (3 miles) per hour.	3	5	3	4	8	12	18	
Sampling and readings	2	2	2	2	2	
Walks at 4.8 km. (3 miles) per hour.	3	5	8	12	18	
Sampling and readings	2	2	2	2	2	
Walks at 4.8 km. (3 miles) per hour.	6	13	16	
Sampling and readings	2	2	2	