

## RM 10–FM: Comparative Chart of Cardiorespiratory Endurance (CRE) for Unfit and Fit Individuals

(Based on Performance on 20 m Beep Test )

Level of Fitness	Level Completed on 20m Beep Test	VO2 Max* mL/kg/min.	Moderate Intensity (60% of VO2 Max)	Vigorous Intensity (80% of VO2 Max)
Unfit—Low CRE	4	26	15.6	20.8
			walking fast	slow jog
			15 min./mile	
Very Fit—High CRE	14	60.64	36.384	48.512
			running at 6 mph	running at 8 mph
			10 min./mile	7.5 min./mile

\* VO2 Max—the maximum amount of oxygen, in millilitres, one can use in one minute per kilogram of body weight.

Pace min./mile	Treadmill Speed mile/hr. (mph)	ACSM* Walk/Run Equations metres/min.		VO2 Max mL/kg/min.
30	2	53.6	0.1	8.86
20	3	80.4	0.1	11.54
15	4	107.2	0.1	14.22
12	5	134	0.2	30.3
10	6	160.8	0.2	35.66
8.571428571	7	187.6	0.2	41.02
7.5	8	214.4	0.2	46.38
6.666666667	9	241.2	0.2	51.74
6	10	268	0.2	57.1
5.454545455	11	294.8	0.2	62.46
5	12	321.6	0.2	67.82

\*ACSM—American College of Sports Medicine.

Completed Level on 20 m Beep Test	Corresponding VO2 Max mL/kg/min.
4	26.04
5	29.5
6	32.95
7	36.42
8	39.88
9	43.3
10	46.8
11	50.26
12	53.7
13	57.2
14	60.64
15	64.1