

Train Characteristics



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14. Train Characteristics

This Appendix to Chapter 14 of the Environmental Impact Assessment Report (EIAR provides information concerning the assumptions which have been made in the modelling of groundborne noise and vibration from the operation of MetroLink.

14.1 Rolling Stock

The trains assumed for the MetroLink are based on the design of those used on the Metro in Madrid, which are CAF 6000 units. The assessment is based on the train design specifications set out below. Although the RO permits a range of train design specifications, any such design (and associated impacts) will be within the scope of what has been assessed in this EIAR.

The parameters used in modelling are given in Tables 14.1 and 14.2.

CAF Series 6000	Tare scenario	Maximum load scenario	Maximum exceptional load scenario
Number of cars	3		
Bogies by car	2		
Mass of motor car body [kg]	23020	41020	44020
Mass of motor bogie [kg]	4313	4313	4313
Mass of axis [kg]	1381	1381	1381
Axle load [kg]	9292,5	13792,5	14542,5
Unsprung mass [kg]	1381,0	1381,0	1381,0
Unsprung mass [%]	14,9	10,0	9,5

Table 14.1: Rolling Stock Parameters - CAF Series 6000

Table 14.2 CAF Series 6000 Dimensions

Aspect of Rolling Stock	Dimension, m		
Bogie wheelbase	2.25		
Bogie pivot spacing	13.5		
Length over couplers	24.0		





Diagram 14.1: Speed/Distance Diagram for Rolling Stock