

Structural Loading of Fire Engine on Accessway

The following information will assist structural engineers in the design of accessway.

- (i) In general, the minimum width of the accessway shall be 6m wide and the minimum length shall be 15m long. Diagram A shows the relationship between the accessway and parked fire engine with its front and rear jacks extended Accessway sizes

- (ii) Accessway shall be on Accessway loading
- (a) suspended slabs, or
 - (b) on metalled or paved ground, or
 - (c) ground laid with strengthened perforated slabs or
 - (d) approved materials

to withstand the loading requirements of fire engine.

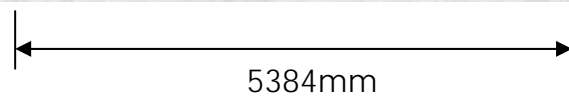
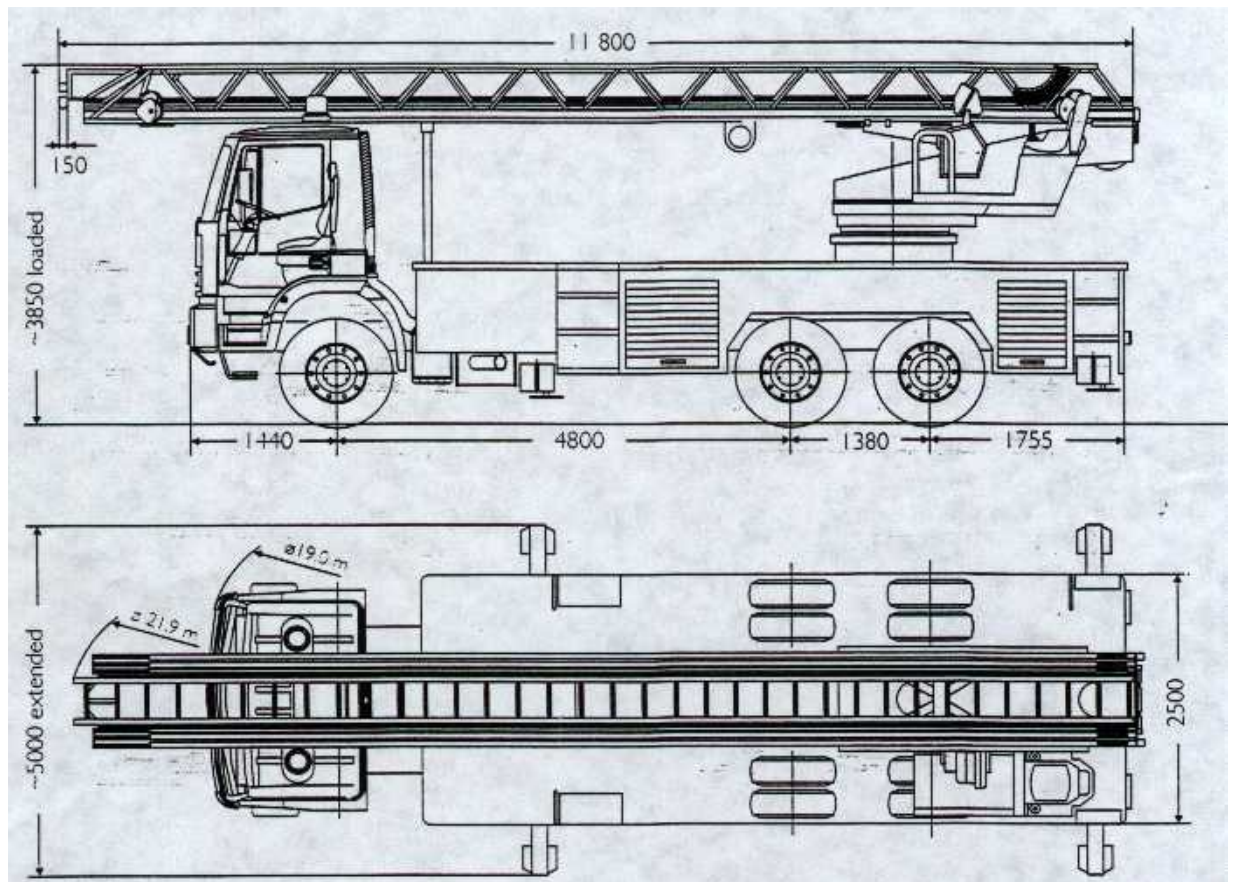
- (iii) The accessway required to serve building shall be constructed to sustain the load of a 30 tonnes fire engine. The wheel load shall be considered separately with the jack loads for both global and local effects.

- (iv) Axles load for accessway shall be as follows : Axles load

Front Axle	7500kg	2 wheels
Rear Axle	21,000kg	8 wheels

- (v) The jack load shall be assumed to be uniformly distributed over a rectangular contact area of 923 cm² for both local and global analysis.
- (v) The maximum pressure on one jack, even in the worst case, will not exceed 80N/cm².
- (vi) In the absence of more exact calculations, live load surcharge for accessway on suitable material properly consolidated may be assumed to be at least 10KN/m².

ACCESSWAY (WHEELS & JACKS LAYOUT)



Wheel Spacing