The concept of a "time delay" for a stop

Stopping Case

move between floors accelerating and decelerating

non-stopping Case

pass a floor while travelling at top speed

\[ t_v = \frac{d_f}{v} \]
\[ t_f = \frac{d_f}{v} + \frac{v}{a} + \frac{a}{j} \]

Delay caused by a stop

\[ (t_f - t_v) \text{ s} \]