



Table of Contents

Voltage Drop Calculations

Part A – Conductor Resistance Calculations

Conductor Resistance

Conductor Resistance – Direct-Current Circuits, [Chapter 9, Table 8]

Conductor Impedance – Alternating-Current Circuits

Alternating-Current Impedance as Compared to Direct-Current Resistance

Impedance [Chapter 9, Table 9 of the NEC]

Part B – Voltage-Drop Calculations

Voltage-Drop Considerations

NEC Voltage-Drop Recommendations

Determining Circuit Conductors Voltage Drop

Sizing Conductors to Prevent Excessive Voltage Drop

Limiting Conductor Length to Limit Voltage Drop

Limiting Current to Limit Voltage Drop

Extending Circuits

Calculations Questions