



## Weights and Axle Loads

Wind turbine component vehicles are selected and designed to distribute component and vehicle weight to loads of approximately 12 to 15 tons per axle. Table 1 lists typical component weights for a 3.x wind turbine with a steel 110m tower.

**Table 1. Weights and Dimensions for Wind Turbine Component Delivery Loads**

Shipment	Weight (lb)	Weight (tons)	Length (ft)	Height (ft)
Blade 1	41,224	20.6	208.9	9.3
Blade 2	41,224	20.6	208.9	9.3
Blade 3	41,224	20.6	208.9	9.3
Nacelle	168,000	84.0	37.0	12.4
Hub	74,000	37.0	12.5	12.5
Power equipment: Shipment 1	20,900	10.5	24.8	12.5
Power equipment: Shipment 2	25,800	12.9	24.6	10.4
Tower section 1 (base)	118,000	59.0	39.4	14.1
Tower section 2 (mid C)	116,000	58.0	39.4	14.1
Tower section 3 (mid B)	118,000	59.0	68.0	14.1
Tower section 4 (mid A)	116,000	58.0	91.8	14.1
Tower section 5 (top)	88,000	44.0	98.4	10.1
Foundation hardware	25,135	12.6	15.8	3.3

### Notes:

1. Components weights are for a typical 3.x wind turbine with 137m rotor and 110m hub height.
2. Nacelle weight assumes generator and gearbox are shipped with the nacelle. For some wind turbine models these components may be shipped separately, resulting in a lower shipping weight for the nacelle.
3. Weights include weight of component and related shipping fixtures (e.g., blade shipping fixtures).
4. Power equipment is typically shipped in modular units that contain the transformer, switchgear, controllers, and converters. It is typically shipped on standard flatbed trucks with two units per truck.
5. Heights and weights are for the components only. Loaded vehicles will be slightly taller and longer.

# Estimated Rate of Truck Deliveries During Project Construction Average Trucks/day vs. Week of Construction

