

High-Cube Warehousing or Distribution Center

High-cube warehouses or distribution centers are primarily for the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials) prior to their distribution to retail locations or other warehouses. These facilities are generally very large buildings characterized by a small employment count due to a high level of automation, and truck activities frequently outside of the peak hour of the adjacent street system.

High-cube warehouses and distribution centers are defined as follows:

Very large shell buildings commonly constructed using steel framed and/or concrete tilt-up techniques with a minimum gross floor area of 200,000 feet, a minimum ceiling height of 24 feet and a minimum dock-door ratio of 1 door per 10,000 square feet.

A review of Trip Generation 7th Edition (Institute of Traffic Engineers, 2003) indicates the weekday PM peak-hour trip generation rate for high-cube warehouses is approximately 0.12 trips per thousand square feet (TSF) of building area, and is approximately 0.66 trips per employee. By comparison, traditional warehousing uses have a weekday daily trip generation rate of 4.96 trips per thousand square feet and PM peak-hour trip generation rates of 0.45 trips per thousand square feet and 0.59 trips per employee. A study completed in January 2005 by Crain and Associates for the National Association of Industrial and Office Properties (NAIOP) indicates a weekday daily trip generation rate of 1.10 trips per thousand square feet and a weekday PM peak rate of 0.08 trips per thousand square feet for high-cube warehouse sites.

Acceptable Trip Generation Rates

Where other uses such as wholesale showrooms, retail showrooms or office suites are co-located with qualifying high-cube warehouse or distribution facilities, only the qualifying warehouse portion of the premise will be calculated using the following rates.

Daily trip generation rate – 1.46 trips per thousand square feet of gross floor area.
(Extrapolated from ITE PM peak hour rates)

PM Peak generation rate – 0.12 per thousand square feet of gross floor area.
- 0.66 per employee.