

Load Performance Guidance

StormBrixx is designed to exceed the American Association of State Highway and Transportation Officials (AASHTO) LRFD recommended design factors for Earth loads and Vehicular live loads.

The two classifications are: a **H** series truck (two-axles) and a **HS** series truck (multiple loaded axles, i.e. a semi-trailer vehicle). The number following the “H/HS” is the gross tonnage of the vehicle. To determine the total tonnage of the HS series truck, add one additional trailer axle load. The images below illustrate the axle load and spacing breakdown for both H and HS trucks.

Note: H series equivalent of these loads removes the back axle.



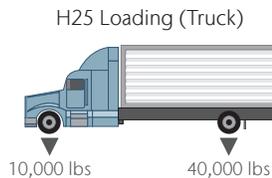
STORMBRIXX SD

Both **H20** and **HS20** series trucks have an 8,000 lb axle load for the drive axle and a 32,000 lb axle load for the axle(s) under the trailer. The difference between the two vehicles is that a H20 series truck has one axle under the trailer and a total load of 40,000 lbs, and a HS20 series truck has an additional 32,000 lb-load axle located under the trailer, which is separated by a min. distance of 14' for a total load of 72,000 lbs.



STORMBRIXX HD

H25 and **HS25** trucks are almost identical to H20/HS20, except the drive axle supports 10,000 lbs and the axle(s) under the trailer support 40,000 lbs each.



American Truck Load Description

Multiple axle trucks fall into the same category as the AASHTO standards documented above. This is due to maximum gross vehicle weight limits set at 80,000 lbs by the US Department of Transportation – Federal Highway Administration.

Below are the federally mandated maximum weights for the National System of Interstate and Defense Highways and reasonable access thereto (23 CFR Part 658.17):

1. 80,000 lbs gross vehicle weight
2. 20,000 lbs single axle weight
3. 34,000 lbs tandem axle weight

Axle capacities are limited either by the axle strength or legal weight limits, whichever is lower. Trucks shown have a front-drive axle rated at 12,000 lbs, limiting the weight on those axles. The legal weight limit of a rear axle on a **single-drive** truck is 20,000 lbs. The legal weight limit of the two rear axles on the **tandem-drive** truck is 17,000 lbs for each axle, or 34,000 lbs combined if the overall distance between the first and last axle is 36' or more.

Axle load is applicable to trucks that may have more than two wheels per axle. In this case, the axle load remains the same, but the load applied by the individual wheels is reduced by having more contact area due to more wheels to distribute the load. The primary factor is distance between axle centerlines.

Vehicles exceeding AASHTO HS25, see AASHTO Modified Advanced Military Loading (AML) or contact local officials.

