Boom vehicle are often used by phone, cable television and utilities firms as they have extended folded arms which are typically folded over the roofs of business vehicles. On the end of the extension of extendable arms usually sits a bucket-like apparatus. When a bucket truck has an extendable boom mounted the roof this is sometimes referred to as an "aerial boom truck" or a "cherry picker". It is able to transport workers to the peak of a phone or utility pole. Bucket boom lift trucks have a lifting capacity of approximately 350 lbs to 1500 lbs or 158 kg to 680 kg and are capable of extending the bucket up to 34 feet or just over 10 meters into the air.

Heavy equipment boom trucks or construction boom vehicles might have a crane attached to the rear. These cranes referred to as knuckle booms may be short and compact or be of the trolley boom kind, where the crane is able to extend the span of the vehicle bed. Crane boom trucks include a lifting capability between 10 to 50 tons or around 9 to 45 metric tons.

Concrete boom trucks are a further adaptation. The booms on these vehicles have a pipe with a nozzle at the extreme end and are used to pump concrete or other materials. The areas where these resources need to be deposited is oftentimes inaccessible to the truck or is stationed at a substantial height, therefore, the boom of a larger concrete boom vehicle may be extended 230 feet or approximately 71 meters. The truck then pumps the material through the boom completely depositing it into the space where it is needed.

Fire engines are normally outfitted with a boom bucket able to raise firefighters up to the higher floors of buildings. Furthermore, this boom will permit firefighters to guide the flow of water or to engage or rescue trapped victims. A lot of of the older hook and ladder trucks have been replaced with contemporary boom vehicles.

Self propelled booms are quite similar to lift trucks. These little boom vehicles can hoist workers to lofty storage space or to the ceiling of large warehouses and storeroom offices. They are more secure and therefore much safer than using extension ladders for the same application.