

## Safety and Automotive Floor Mats

There are three main features of auto floor mats that determine the degree of safety achieved: fit, backing and retention system. These three features are critical to the safe functioning of the driver's side of the auto floor mat. They are also used for the passenger and rear mats to achieve equal appearance and performance.

The first feature, fit, achieves good appearance if a custom fit mat is used. More importantly a custom fit will prevent movement which is critical on the driver's side. If a mat moves, it can interfere with the vehicle controls hampering operation of the brake and accelerator pedal. When this occurs neither the brake nor the accelerator will work properly. Depending on the design of the vehicle improper location of the mat can create a bridge between the brake and accelerator so that when a driver steps on the brake they are actually pushing on the accelerator. The position of the mat is intended to remain in its original location to meet the OEM (Original Equipment Manufacturer) specifications. Universal and semicustom fit mats have a tendency to move which can create a dangerous situation. A custom fit is also a passive installation in that it is predesigned during manufacturing to precisely fit the space of a particular vehicle. The driver only needs to place the right custom fit mat in the vehicle to reduce movement: this is the first step to a safe mat.

The next step is to choose a custom fit mat with an engineered backing that meets an OEM specification. There are many backings due to different OEM carpets used on the floor of the vehicle. There are tufted and nonwoven or needle punch carpets. There are different pile heights, weights and density that must be considered in designing the backing. This presents a challenge in selling to the aftermarket which includes every type of vehicle and different carpets. GGBailey.com is the first OEM qualified manufacturer to offer an engineered backing used by the OEM market directly to the consumer for any vehicle. Our Mat-Loc® backing has been used for 30 years on floor mats in the best engineered vehicles in the industry.

Even with a custom fit mat with an engineered backing it is critical to use a good retention system. Retention systems must be properly developed to avoid disengagement while driving and should not be able to separate from the mat. Racemark International, parent company of GGBailey.com, patented a retention system in 1986 before any were built into the floor of a vehicle. This versatile clip system, Mat-Loc™ Clips, can be used in any vehicle to help prevent movement. As the importance of a secure mat became known, retention systems became part of the vehicle in the form of grommets and posts popular on Detroit manufactured vehicles or our second generation Mat-Loc™ disk device. One disk is screwed into the floor or is built into the floor and the second disk is on the back of the mat. They passively engage when the mat is placed on the floor of the vehicle. This does not require the consumer to actively engage a system like the grommet post does. It engages automatically reducing human error.



In summary, to achieve the maximum safety always choose a custom fit mat with an engineered backing and a state of the art retention system. GGBailey.com and Racemark International have proactively created these safe features for our mats for over 30 years.