

## SHOP FLOOR LAYOUTS To Maximize Space, Increase Efficiency & Streamline Production

Whether you operate a small or large collision repair facility, this guide will help you determine an ideal layout for your shop. The red numbers show where equipment and production areas are best positioned, so that vehicles can flow through a shop without causing a backlog.

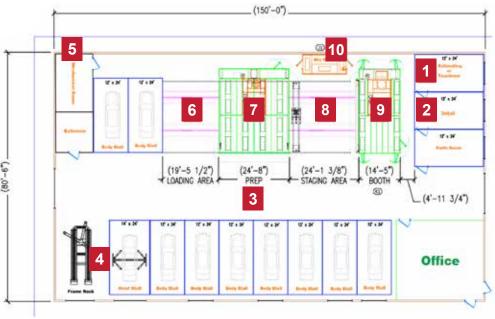
## SAMPLE FLOOR LAYOUT IN A SMALL COLLISION FACILITY

For collision repair shops tight on space, good planning and modern equipment are key to maximizing efficiency.

In this example, the shop has the equipment and capabilities to perform small, light repairs, as well as big, heavy repairs. No matter which stall or area a vehicle is placed, it is never blocking another vehicle or stopping workflow. Any vehicle can be accessed or moved at any time. This shop also uses a quick lane system for small repairs (one to four panels). High-production shops using this model can typically process **12 to 15 cars per day**.

- 1. **Estimating and teardown bay:** Separated from the main shop to not impede production
- 2. **Detail bay:** Fully isolated from the main shop to prevent chemical contamination in the work area
- 3. **Drive lane:** Open lane, allowing parts, carts and vehicles to be moved to any stall at any time
- Frame rack and hoist stall: Positioned directly in front of overhead doors, so non-drivable vehicles can be towed directly into the stall
- 5. **Mechanical room:** Fully framed off, isolated room, which keeps electrical and mechanical areas free of dust and debris
- 6. **Side-load system:** Wheels are placed on a track and dolly system, enabling vehicles to be fully masked before being loaded into paint areas; this eliminates downtime traditionally spent masking cars inside the paint booth
- 7. **Prep stations with a quick lane:** Vehicles needing primer are loaded into the right-hand bay of the prep station; the left side is used for quick lane repairs, where vehicles with four panels or less are painted in the prep station

- 8. **Staging area:** Vehicles are fully sanded and masked for painting
- 9. **Paint booth:** A premium downdraft paint booth ensures higher-quality paint jobs and maximizes efficiency
- 10. **Paint mix room:** Centrally located between the paint booth and the quick lane prep with doors opened to either side, minimizing steps from one to the other



## SAMPLE FLOOR LAYOUT IN A LARGE COLLISION FACILITY

The following design offers the majority of the features GFS recommends for a large collision facility layout. This layout shows only the production area of the shop – all estimating, teardown and detailing are performed in another section of the building. Shops with this model can typically process **18 to 25 cars per day**.

- 1. **Drive lane:** Open lane, allowing parts, carts and vehicles to be moved to any stall at any time
- 2. **Hoist stall:** Positioned directly in line with the drive lane, so non-drivable vehicles can be towed directly into the stall
- 3. **Quick repair area:** Vehicles needing very small repairs, typically only one to three panels, are worked on in this area; the vehicles are open to either drive lane, so they can be positioned in the first booth that becomes available
- 4. **Detail area:** Located as far away from the paint area as possible to prevent chemical contamination in the paint area
- 5. **Heavy-hit stalls:** Grouped together so they can share specialty tools, such as welders and measuring equipment
- 6. **Medium-hit stalls:** Vehicles with multiple-panel damage and light structural damage

## 7. Paint area

- A. **Paint booth:** A premium downdraft paint booth ensures higher-quality paint jobs and maximizes efficiency
- B. Hybrid prep station (CTOF booth): Vehicles needing primer are primed here, then side-loaded to 7A (paint booth) for painting; this area also doubles as an overflow for the quick lane
- C. **Quick lane:** Vehicles with four panels or less are painted in the prep station
- 8. **Side-load system:** Wheels are placed on a track and dolly system, enabling vehicles to be fully masked before being loaded into paint areas; this eliminates downtime
- 9. **Staging area:** Vehicles are fully sanded and masked for painting
- Paint mix room: Centrally located between both quick lanes and the paint booth with doors opened to either side, minimizing steps from one to the other

