

Footwear and Tire Examinations

Footwear (shoe) and tire impression evidence are two of the most valuable pieces of evidence left at crime scenes, however they are often overlooked. If detected, protected, and properly collected, they can be crucial in linking a suspect, or a suspect vehicle to a scene. In some cases, footwear and tire evidence can lead to the identification of which particular known footwear or tire made the impression.

Note: As of January 1, 2016, the Wisconsin Crime Laboratory Bureau no longer accepts cases and evidence/standards for Tire Track Analysis. The FBI Crime Laboratory in Quantico has agreed to work Tire Track Analysis cases that would normally be sent to the Wisconsin Crime Laboratory.

For more information on how to submit evidence to the FBI Crime Lab, visit <https://www.fbi.gov/file-repository/handbook-of-forensic-services-pdf.pdf/view>. This link is the FBI Handbook of Forensic Services which provides guidelines and procedures for collecting, preserving, packaging, and shipping evidence to the FBI Crime Lab. Step-by-step guidance is provided. In general, the FBI accepts evidence from state and local law enforcement agencies for cases related to violent crime investigations. The FBI does not routinely accept evidence from state and local law enforcement agencies in cases involving property crimes unless there was personal injury or intent to cause personal injury.

I. Requesting Footwear Comparisons

Footwear comparisons are typically conducted between a questioned impression and known footwear or standards taken from the known footwear. Standards are generally powdered lifts of known footwear that can be submitted for comparison. However, these are typically only two-dimensional impressions and often do not provide the detail necessary for analysis. **It is important to have the actual footwear to conduct a complete and accurate comparison.**

A questioned impression may be only a small portion of a shoe and does not need to contain the entire length in order for a comparison to be made. The most important factors are the quality of the impression and proper photography of the impression prior to collection.

Footwear Submissions

1. Submit the **actual footwear** for comparisons as it was recovered (do not clean) & inform lab of the recovery date
2. Submit any standards made from footwear, if taken (*standards should only be submitted in lieu of actual footwear when there is no legal authority or consent to collect them*)
3. Submit the questioned impression(s) (casts, electrostatic lifts, powdered lifts, etc.)
4. Submit all scaled photographic image files of all questioned impressions

Note: Suspects may have more than one pair of the same brand and model of footwear. All can be submitted for comparison.

II. Opinions Rendered By Examiners

The comparison of a questioned footwear impression to known footwear at the Laboratory will result in one of the following opinions:

- Not Suitable for Comparison
- Lacks Sufficient Detail
- High Degree of Association
- Identification
- Exclusion
- Indications of Non-Association
- Limited Association of Class Characteristics
- Association of Class Characteristics