

TENNESSEE BUREAU OF INVESTIGATION

Forensic Services Division

Violent Crime Response Team Standard Operating Procedures

Collecting Fire Debris



10.28 Collecting Fire Debris

10.28.1 Purpose

This procedure provides general guidelines in the collection of fire debris and flammable liquids.

10.28.2 Equipment & Reagents

Metal paint cans
Shovel

10.28.3 Procedure

10.28.3.1 When processing a suspected arson scene, the following items should be collected :

- All igniting devices
- Charred debris and related material from where the accelerant was placed
- Samples of carpeting, padding, plaster, upholstery, wood or other substances that may have been penetrated by flammable liquids. Any fresh stains should be collected.
- Samples of soil which may have been saturated by flammable fluids
- Suspect clothing worn at the time of the crime, including shoes, if appropriate
- Liquids containing possible accelerants
- Broken glass from bottles and material used as a wick from an incendiary device ("Molotov cocktail")

10.28.3.2 When collecting arson evidence:

- Use clean unused airtight metal paint cans.
- Do not completely fill the paint cans with debris (should be no more than $\frac{3}{4}$ full)
- Seal each collected item separately and securely.
- Mark all containers with appropriate identifiers.
- Document locations from which evidence samples were collected in the notes, sketches, and photographs.