



Brad Hays



## SBC Roof Series: Torch Down Roofing Inspection

Inspecting a torch down roof involves several critical steps to ensure its integrity and long-term performance. Here are key inspection steps for a torch down roof:

1. **Surface Condition:** Examine the entire surface for any signs of damage, such as punctures, tears, or blisters. Ensure that the roof is free of debris and standing water.
2. **Seams and Overlaps:** Check all seams and overlaps in the modified bitumen material for proper adhesion and alignment. Look for any signs of separation or gaps.
3. **Flashing:** Inspect all flashing, including metal flashing around roof edges, penetrations, and joints, to ensure that it is secure, properly sealed, and free of damage.
4. **Penetrations and Curbs:** Check around all roof penetrations, such as vents, pipes, and HVAC units, as well as curbs, for proper flashing and sealing to prevent water infiltration.
5. **Drainage:** Verify that the roof has proper drainage and that gutters and downspouts are clear and functioning effectively to avoid standing water.
6. **Insulation (if applicable):** If insulation is part of the roofing system, inspect its condition and installation for proper coverage and adhesion.
7. **Overall Condition:** Assess the overall condition of the roof, looking for signs of wear, weathering, or aging. Check for any areas requiring maintenance or repair.

Regular inspections help identify and address potential issues early, ensuring the continued performance and longevity of the torch down roofing system. It's advisable to schedule periodic professional inspections in addition to regular visual inspections.



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## CORE SAMPLES

A core sample for a built-up roof (BUR) is a method of evaluating the condition and composition of the different layers within the roofing system. It involves taking a cylindrical sample, typically several inches in diameter, from the roof surface down through the various layers, including the membrane, insulation, and substrate.

A core sample is typically several inches in diameter and can vary in depth based on the specific requirements of the evaluation or assessment being conducted.

The typical dimensions for a core sample would range from approximately 2 inches to 4 inches in diameter. As for the depth, it's common for core samples to extend through all the layers of the roofing system, reaching from the surface membrane down to the roof deck. The depth may vary depending on the specific layers being evaluated, but a standard core sample would often extend from the surface through the insulation, vapor barrier, and other relevant layers, providing a comprehensive view of the roof's construction and condition.

The process of taking a core sample involves the following steps:

1. **Locating the Sampling Area:** The area for the core sample is selected based on the need to assess the overall condition of the roof. It may be chosen to represent a typical section of the roof or a specific area of concern.
2. **Preparing the Equipment:** Core sampling equipment, including a coring drill or cutter, is prepared to ensure that it is in good condition and appropriate for the specific roofing materials being sampled.
3. **Cutting the Core:** Using the coring equipment, a cylindrical sample is cut and extracted from the roof surface, typically through all layers down to the roof deck.
4. **Extraction and Analysis:** The core sample is carefully extracted, labeled, and then analyzed to assess the condition of the roofing materials, such as the thickness of each layer, the presence of moisture, signs of degradation, or the adherence of the layers.
5. **Documentation:** The findings from the core sample analysis are documented, and the information can be used to assess the overall condition of the roof and to guide decisions regarding repair, maintenance, or replacement of the BUR system.

Core samples provide valuable insights into the condition and composition of a BUR system, allowing for informed decisions and proactive maintenance to ensure the performance and longevity of the roof.



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Repairing a core sample typically involves filling the void left by the removed core with appropriate replacement materials. Here's a general process for repairing a core sample from a BUR roof:

1. **Preparing the Core Hole:** The area where the core sample was taken should be cleaned and any loose debris should be removed. The edges of the core hole should be inspected for any damage or imperfections.
2. **Replacement Materials:** Depending on the original construction of the roof, the replacement materials may include layers of insulation, asphalt or bitumen, felts or fabrics, and surfacing materials such as gravel or mineral cap sheets.
3. **Layering and Adhesion:** The replacement materials should be layered in a manner that replicates the original construction of the roof. This may involve the use of hot asphalt or cold adhesive to adhere the materials together and provide a cohesive seal.
4. **Compaction and Finishing:** After the replacement materials are in place, they should be compacted to ensure a proper seal and to match the level of the surrounding roof surface. The area can then be finished with surfacing material if applicable.
5. **Seam and Joint Inspection:** Any seams or joints in the repaired area should be carefully inspected to ensure that they are securely bonded and watertight.
6. **Final Inspection and Documentation:** Once the repair is complete, a final inspection should be performed to verify that the repaired area meets the expected standards. The repair should be properly documented for future reference.

It's important to follow manufacturer's guidelines and industry best practices when making repairs to a BUR roof. Additionally, local building codes and regulations should be adhered to throughout the repair process.



\* Check with a licensed roofing contractor for additional information.