

CALVEY RESTORATION LTD

54 St James Street Liverpool, L1 0AB

8 King St Manchester, Stonework Repairs Methodology

Stone Indents

1. **Research and Permissions:**
 - Understand the regulations governing listed buildings in your area. You may need to apply for Listed Building Consent from your local planning authority.
 - Consult with a heritage consultant or conservation officer if necessary.
2. **Assessment:**
 - Inspect the existing structure to determine the best location and method for the new stone indent.
 - Consider the historical significance and architectural style of the building.
3. **Design:**
 - Create detailed drawings of the proposed indent, ensuring it matches the existing stonework in terms of materials, color, and texture.
 - Obtain approval for the design from relevant authorities.
4. **Material Selection:**
 - Choose appropriate stone that is compatible with the existing building. This may involve sourcing locally quarried stone if possible.
5. **Preparation:**
 - Prepare the site by clearing any debris and ensuring a safe working environment.
 - If necessary, temporarily support the surrounding structure.
6. **Cutting and Shaping:**
 - Cut the stone to the required dimensions, ensuring it fits accurately into the indent.
 - Shape the stone to match the profile of the existing stonework.
7. **Installation:**
 - Carefully position the new stone indent into place, ensuring it sits flush with the surrounding stone.
 - Use appropriate mortar to secure the stone, ensuring it allows for movement and drainage.
8. **Finishing Touches:**
 - Point up the joints with mortar or appropriate sealant to match the existing stonework.
 - Clean the surrounding area to remove any dust or debris.
9. **Final Inspection:**

- Have the work inspected by a conservation officer or a professional to ensure it meets all regulations and standards.

10. ****Maintenance:****

- Plan for ongoing maintenance to ensure the new indent remains in good condition and does not affect the integrity of the listed building.

Stone Repairs

1. Surface Preparation

- **Assess the background:**

Evaluate the cause of the decay and the compatibility of the repair mix with the existing stone.

- **Remove debris:**

Clear away any loose or friable masonry and contamination from the area to be repaired.

- **Control porosity:**

Pre-wet porous surfaces before applying the mortar to prevent them from absorbing too much water from the mix.

2. Mortar Mixing

- **Mix with water:** Add the recommended amount of clean water to the dry ST. ONE product.

- **Mix to consistency:** Mix manually or with a low-speed mixer (350-450 rpm) for 3 to 5 minutes until a firm, workable, homogeneous paste is obtained.

3. Mortar Application

- **Dampen the surface:**

Ensure the background is adequately dampened before and during application to improve adhesion.

- **Apply in layers:**

For thicknesses greater than 5mm, apply the mortar in layers of 2 to 4 cm, leaving 6 to 24 hours between each coat.

- **Press firmly:**

The mortar should be well pressed back into place.

- **Re-compact:**

After a couple of hours, re-compact the fresh mortar by pressing it to avoid shrinkage marks from suction.

4. Shaping and Tooling

- **Mold the material:**

In the first 12 hours after application, the ST. ONE material can be molded with a trowel, sponge, or brush.

- **Tool once set:**

Once the mortar has set, it can be worked using traditional stonemason tools.

- **Match existing details:**

Shape and tool the ST. ONE mortar to match the texture and details of the original stone, ensuring the tooling runs in the same direction and pitch as the surrounding stonework.