

Method Statement Form

Project name/number:	Science and Industry Museum, Manchester
Date:	14/04/2025

Description of works:	<i>Reinstatement of brickwork to areas where cabling, conduit, pipes etc. to reduce size of voids to facilitate fire stopping installation.</i>
Location:	1830 Warehouse and New Warehouse.

Methodology:

1.	Reinstatement of brickwork & pointing Reinstatement of original brickwork to voids around cabling, conduit etc. The restorer will follow these steps: Step 1: Reinstatement of original brickwork Original Brickwork: Infill holes using an original brick and approved mortar specified from mortar analysis. Step 2: Mix the NHL Mortar Prepare the Mortar: Mix the NHL sand-lime mortar according to the manufacturer's instructions. A typical mix for NHL 3.5 could consist of: • 1 part NHL (Natural Hydraulic Lime) • 3 parts clean, well-graded sand Adjust the proportions based on the specific requirements and conditions of the building. Add Water Gradually: Slowly add water to the dry mix until you achieve a workable consistency. The mortar should be pliable and hold its shape without being too wet or runny. Let It Rest: Allow the mixed mortar to rest for about 5-10 minutes before using it. This improves workability and performance. Step 3: Apply the New Mortar Fill the Joint: Using a pointing trowel, pack the new NHL mortar into the prepared joint. Start from one end of the joint and work inward, ensuring that the mortar is well-compacted to avoid air pockets. Layer Application: If the joint is deep, apply the mortar in layers, allowing each layer to stiffen slightly before adding more. This approach prevents cracking as the mortar dries. Tool the Joint: Once the joint is filled, use the edge of the pointing trowel to smooth and shape the mortar surface. Aim for a slightly recessed or flush finish to match the surrounding mortar joints.
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	Step 4: Finishing the Joint Shape the Joint: Use a jointing tool or the trowel's edge to shape the mortar to match the profile of the existing joints. This step is crucial for ensuring that the repair blends seamlessly with the surrounding masonry. Remove Excess Mortar: As the mortar begins to set, use a stiff bristle brush to lightly brush the surface of the joint, removing any excess mortar and helping achieve a consistent texture. Step 5: Curing the Mortar Keep Moist: Natural hydraulic lime mortars require adequate curing to develop strength and durability. Mist the joints lightly with water for several days (depending on weather conditions) to ensure slow, even curing. This prevents the mortar from drying too quickly and cracking. Protect from Weather: If rain or extreme heat is forecasted, protect the newly filled joints with hessian or a breathable cover to allow proper curing while preventing washing out or cracking.
2.	Tools and Materials Required: • Pointing trowel • Chisel and hammer (or a mortar rake for wider joints) • Soft brush • NHL sand-lime mortar (NHL 3.5 or NHL 5, depending on requirements) • Clean, well-graded sand (e.g., sharp or washed sand) • Water spray bottle • Mixing bucket • Stiff bristle brush • Gloves and safety goggles