THIS METHOD STATEMENT COVERS THE INSTALLATION AND WELDING OF **MasterSeal 940.**

METHOD STATEMENT: MasterSeal 940 INSTALLATION AND WELDING

1. INSTALLATION:

1.1. **MasterSeal 940** ICJ & IEJ profiles must be installed so they are securely held in the correct position whilst the concrete is poured.

1.2. The concrete must be fully and properly compacted around the waterstops.

1.3. Adequate clearance must be left between reinforcing steel and waterstops to allow proper compaction of concrete.

1.4. **MasterSeal 940 ECJ & EEJ** has pre-punched eyelets in the flanges/wings of the profiles to allow them to be wired to the surrounding reinforcing steel.

1.5. **MasterSeal 940 ECJ & EEJ** profiles when used on ground slab blinding concrete, where a permanent, firm and stable support is given usually require no fastening. The profile is simply laid centrally over the line of the joint to be formed. Fixing to vertical shuttering is simplified by nailing with small or headless nails through the outer flange/wings to keep it in place.

2. EQUIPMENT:

2.1. Electric heater blades are used to join waterstop connection by direct contact, heat fusion. Optionally, jointing jigs can be fabricated with channels that would fit the ribs of the waterstop, for gripping and to aide with the welding process.

3. JOINT CONNECTIONS:

3.1. Reliable jointing of **MasterSeal 940** waterstops can be carried out rapidly onsite with a proper heat welding equipment and cutting tools. This comprises of electric heater blades, welding jigs (if available), utility knife and straight rule.

3.2. For easier and more reliable welding intersections of **MasterSeal 940**, pre-fabricated intersection joints are available for all profiles. Please see product data sheet for more details.

4. JOINT WELDING:

4.1. Clean the electric heater blade, plug it into the correct voltage electricity supply and leave in a safe position to warm up.

4.2. Ensure that the ends of the waterstop to be jointed are of the same width and profile then align the two edge together and position them for welding. Use a straight rule and sharp utility knife to cut and align the edges of waterstops. Consider an extra few millimeters of waterstop during measurement and cutting since the length will reduce while melting.

4.3. Once fully heated, position the heater blade between the two edge of waterstops. Press both waterstops against the plain surface of heater blade to allow proper and balanced melting of the waterstop. The waterstop should melt without burning or charring, allowing a bead of molten PVC with approximately 3mm in diameter appears along either side of the heater blade.

4.4. Slide the heater blade away leaving the molten PVC on the edge of the waterstops, then immediately join the two ends together, pressing the molten PVC against the joint.

4.5. Support the connection for few minutes and allow to cool down until it stiffens and gain strength. Any minor defects/small gaps can be touched up by melting the PVC using an industrial hot air blower.

4.6. In case of minor shortage in length due to misalignment, wrong cutting and/or defective welding, causing the waterstop edges not to meet/touch, cut the existing waterstop to keep the gap at least 300m and rejoin them with a new cut piece of waterstop with sufficient length.

4.7. Clean the heater blades while still hot using emery paper or wire brush.