INTRODUCTION

The ClariWash system is a self washing filtration system which is hydraulically automatic and does not need manual intervention or a control system to achieve backwash. Provided raw water is supplied to the inlet, the system should continue to operate indefinitely, filtering the water and periodically backwashing, requiring little maintenance. The system is formed from locally available plastic pipes tanks and plumbing and does not require a manufacturing process. Thus keeps the cost low.

In order for the system to operate correctly, it is important that the geometry and dimensions shown on the scheme drawings (supplied separately) are adhered to exactly and that the completed system is tested and shown to be leak tight.

This manual is a step by step guide showing the method and order of assembly of the system.

There are separate instructions for installing the filter media, testing and commissioning of the system.
1. Drill holes in 250 OD inlet pipe for 40 OD (inlet) and 50 OD (outlet) tank connectors.

2. Insert tank connectors using curved washers.

3. Prepare inlet pipe-work plumbing.

4. Connect top inlet plumbing to tank connector.

5. Solvent cement 350 square uPVC bottom plate to 250 OD inlet pipe.

INLET PIPE ASSEMBLY
1. Drill hole in 315 OD clarifier pipe for 50 OD tank connector.

2. Insert tank connector using curved washers.

3. Select 2 Nr 250 OD pipe support pieces and cut in two.

4. Solvent cement support pieces to bottom plate & top plate (not shown).

5. Solvent cement 315 OD clarifier pipe to bottom plate assembly to 315 pipe.

6. Drop 280 OD open mesh circle onto top of lamella pipes.

7. Insert 14 Nr 63 OD PVC pipes as lamella tubes.

8. Drill hole in top plate and insert 50 OD tank connector.

9. Drop second 280 OD open mesh circle onto top of lamella pipes.

10. Solvent cement top plate assembly to 315 clarifier pipe.
1. DRILL HOLES IN 315 OD FILTER PIPE FOR 50 OD TANK CONNECTORS.

2. INSERT TANK CONNECTOR USING CURVED WASHERS.

3. PREPARE AND INSERT INTERNAL PLUMBING. ENSURE BOTTOM TEE WILL BE FLUSH WITH BASE TO PROVIDE SUPPORT.

4. SOLVENT CEMENT 315 OD FILTER PIPE TO BOTTOM PLATE.

5. DRILL FILTER TOP PLATE AS SHOWN ON DRAWINGS.

6. INSERT TANK CONNECTORS AND TIGHT FIT 10mm COPPER PIPE.

7. SEAL ROUND COPPER PIPE WITH PLASTIC REPAIR EPOXY—BOTH SIDES.

8. SOLVENT CEMENT 180 OD DROP PIPE TO FILTER TOP PLATE.

9. PLASTIC REPAIR EPOXY BETWEEN 180 DROP PIPE AND COPPER PIPE TO HOLD IN PLACE.

FILTER ASSEMBLY
1. CAST FRAME AND CATCH-POT IN CONCRETE BASE.

2. BUILD BRICK BASE TO WATER TANK.

3. UNDERTAKE PLUMBING BETWEEN UNITS

4. CARRY OUT WATER TEST (SEE SEPARATE INSTRUCTIONS)

5 INSTALL FILTER MEDIA (SEE SEPARATE INSTRUCTIONS)