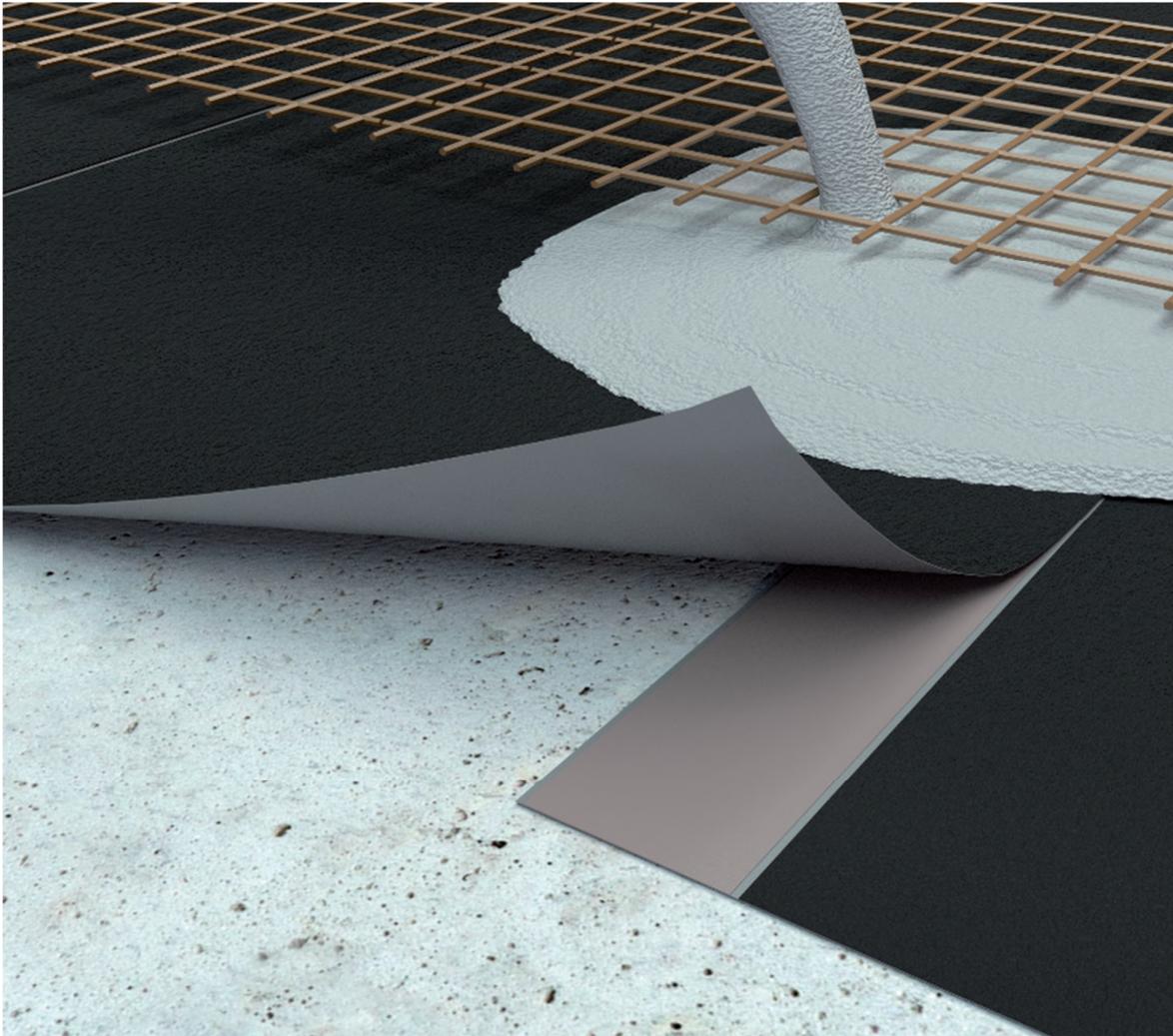


GENERAL METHOD STATEMENT
MasterSeal 754



1 Scope

This document outlines the general method for application and processing of pre-applied, fully bonded, FPO waterproofing membrane, **MasterSeal 754**, for below ground concrete structures.

2 Materials

The table below describes the system built-up material from Master Builders Solutions Construction Chemicals UAE and shall be supplied by the applicator and must be in accordance with the material approvals

Item	Description Of Material
MasterSeal 754	Pre-applied FPO waterproofing membrane, 1.6 mm thick
MasterSeal 754IC / MasterSeal 754OC	(OPTIONAL) Internal and external corner accessories with self-adhesive top layer
MasterSeal 934	Sealing tape: Butyl / FPO
MasterSeal 935	Double side butyl tape
MasterSeal 938	Repair tape: Butyl / FPO / Fleece
MasterSeal 914	Epoxy Grout
MasterFlow 980	High-strength micro concrete for pile head re-profiling

3. QUALIFICATIONS

- **Master Builders Solutions - Supplier's qualifications:** The supplier of the specified products shall offer a program for training, certifying, technically supporting and periodically re-certifying contractors Supplier's Site Representative should be capable of instructing successful methods for installation and also capable of explaining, technical aspects of correct material selection, mixing, use and application.
- **Applicator's qualifications:**
 - The applicator shall be experienced with both material application and surface preparation and shall supply all labour, materials, equipment and incidental equipment required to install **MasterSeal 754** system as specified in this method statement.
 - Work shall only be executed by trained and qualified employees certified by the supplier

4. MasterSeal 754 System – GENERAL APPLICATION

4.1 Substrate Preparation

- Substrates must be regular and smooth, free of loose aggregate and sharp protrusions.
- All sharp corners / edges to be chamfered with minimum 30mm
- Surface should be sufficiently dry, standing water must be removed.
- Horizontal substrate requirement is a minimum of 100mm blinding poured over compacted ground or mass concrete layers.
- Vertical substrate should be either evenly smooth surface of shotcrete, reinforced concrete or concrete blocks.
- Piles should be re-profiled with **MasterFlow 980**.

4.2 Corner Installation

- Install the pre-fabricated corners **MasterSeal 754IC** and/or **MasterSeal 754OC** and remove protective foil prior to installation of the membrane sheets.



**MasterSeal 754IC,
Pre-fabricated corner piece**

- If pre-fabricated corners are not available, corners can be formed using **MasterSeal 934** tapes as shown.



Fold and bend the tape so that it overlaps. Remove the protection foil on the lower layer of the tape

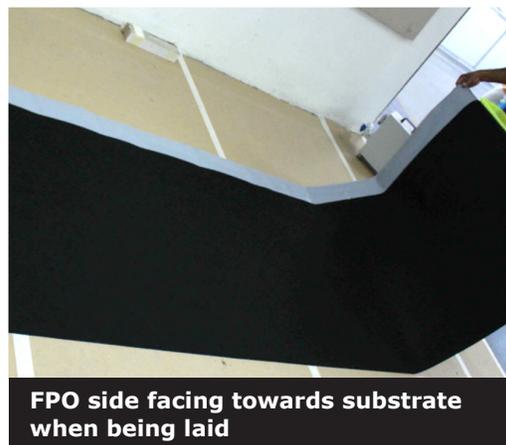


- Install **MasterSeal 934** tapes to seal vertical and horizontal corners.



4.3 Membrane Installation

- It is important to ensure that the FPO side is always faced towards any source of water ingress and that the black fleece coating is faced towards the inner side where concrete will be poured. Commence the membrane installation from a corner. Longitudinal joints are to be overlapped using the manufactured butyl strips or adhered in the corners with **MasterSeal 934** sealing tape.



- Start membrane installation from corners and adhere them to the pre-installed corner tapes.



Adhere membrane to the pre-installed corner tapes (Horizontal installation)

- Vertical membrane can be temporarily supported with a wooden batten and screw. Screw should be placed where overlapping is expected to ensure closure during overlapping. Number of fixation should be minimized as this could be a possible passage of water.



Adhere membrane to the pre-installed corner tapes (Vertical installation)

- Remove protective foil when adhering membrane overlaps together.

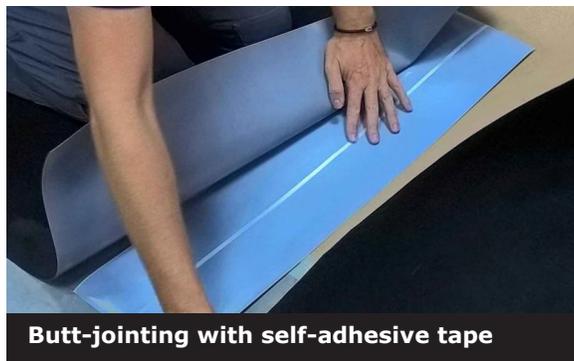


Adhere membrane to the pre-installed corner tapes (Vertical installation)



Pre-manufactured overlap

- Join succeeding membranes through the pre-manufactured overlaps.



Butt-jointing with self-adhesive tape

- For the sides of membrane without the pre-manufactured overlaps, butt-jointing of membrane can be done using **MasterSeal 934** tapes.

4.4 Pipe Penetration



Pipe through the hole on membrane

- Cut a hole on the membrane slightly smaller than the pipe and insert the pipe through and fit snugly to the opening.



Pipe wrapped with Repair tape

- Dress the pipe with **MasterSeal 938** repair tape. Remove the fleece on membrane at overlaps for bonding.

4.5 Pile Head Treatment

- Cut a hole on the membrane slightly smaller than the pile and insert the pile through and fit snugly to the opening. A strip of double sided sealing tape **MasterSeal 935** can be placed at the base of the pile prior to installation of membrane.
- Dress the pile using **MasterSeal 938** repair tape as shown. Remove fleece on membrane at overlaps for bonding.



Pile head through the hole on membrane



Pile head wrapped with MasterSeal 938

- Cut the **MasterSeal 938** repair tape from top and fold down, then encapsulate the pile with **MasterSeal 914** epoxy grout.



Note:

Removal of formworks having **MasterSeal 754** should be done at least 7days after pouring to ensure adequate curing of concrete that is essential to the adhesion of membrane. If cannot be avoided due to time constraint, the formworks should be carefully removed, ensuring all temporary mechanical fixation or adhesive used for the membrane, that may cause the membrane to peel away from concrete, are initially removed.

5. Repair and Maintenance

- Patching of damage internally can be done by burning the fleece using a hot hair gun and scraping it off as much as possible, then cover the damage with **MasterSeal 938** repair tape. If the membrane is going to be exposed after removal of shutter, the damage can be once again patched with **MasterSeal 934** tape.

6. Inspection and Quality Control

- Work shall be visually inspected for damages before and after installation of steel reinforcements.

7. Material Storage

- Store materials under dry and shaded conditions. Do not expose to direct sunlight.

STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this Master Builders Solutions publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by Master Builders Solutions either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not Master Builders Solutions, are responsible for carrying out procedures appropriate to a specific application.
