WATERPROOF TANKING
SPECIFICATION SHEET NO. 3

1) DESCRIPTION AND USE

The specification below must be adhered to by our client or his contractor for Waterproof Tanking to earth retaining walls, returns and below walls damp proof coursed by Wing Preservation Ltd. Where Waterproof Tanking is carried out by Wing Preservation Ltd, we may in some instances vary the specification used, without lessening of the design functions, at our discretion and without prior notice. The System is for structural waterproofing and is suitable for most types of brickwork and concrete structures subject to dampness and water pressures. For example, earth retaining walls in basements, vaults, cellars & areas beneath front entrance steps.

2) BASIC PREPARATION (by others)

To be carried out by client's own builder under a separate contract PRIOR to our arrival on site.

- Remove all furniture, floor coverings and/or fully protect fixed floorings or furnishings etc. elsewhere.
- Remove all joinery timbers, plumbing and sanitary fittings and ALL other obstructions.
- Remove gas, water and electricity services from the wall or soffit surfaces. Incoming services ideally should not penetrate tanking ,but if unavoidable need to be run through cast iron sleeves, which should extend at least 50mm from the wall and be a distance of at least 100mm from any wall, floor, soffit or other sleeves, to allow for sealing. The service sleeves will need to have both ends sealed, by others.
- Disconnect electrical services and remove electrical fittings. If new or existing electrical conduits are to be covered by the Tanking, oversize chases must be cut into the substrate and the services positioned BUT NOT FIXED to allow render coats to be applied partly behind the conduit and fittings. Exposed ends of wires need to be taped with the switch plates removed and the boxes protected. Within entrance lobby's and vault areas, all electrical services must be surface mounted, following our works, due to the increased risk to these areas.
- Remove existing render or other wall finishes completely (unless this is to be carried out by Wing Preservation) and the existing floor screed for a distance of approximately 300mm from walls to be Tanked, or in some situations the whole screed.
- All embedded timbers need to be removed and voids bricked in. Timber lintels replaced with one piece concrete lintels. Any poorly bonded or otherwise unsound brickwork must be cut out and replaced using mortar of a 1:3 cement/sand mix.
- All RSJ's, steel filler joists etc. need to be encased in reinforced concrete or Gunite.
- All coal chutes or other openings must be filled with concrete.
- Abutting 100mm brickwork or blockwork, should be cut back to allow for continuous Tanking to main walls and oversize pockets cut into the main walls to facilitate re-bonding of abutting walls, or profiles can be glued to the render. Any abutting studwork and plasterboard must be cut back.
- All brickwork to be waterproofed, must be a minimum of 229mm solid thickness, brickwork or 7 newton concrete blocks. Please ensure newly constructed walls are bonded into the existing structure with the joints raked back. (Lightweight blockwork is an unsuitable substrate for waterproof tanking render).
- A sound reinforced floor slab of 150mm thickness, tied into the existing structure, and laid on an approved damp proof membrane, must be in place prior to our arrival. Please note that a 21 day cure period is required for new slabs, prior to Tanking.
- All door and window frames/linings must be removed and set aside. Openings to be adjusted as necessary to allow for the 20mm render coats. Frames need to be wrapped in physical damp proof course prior to refitting.
- Any structural alterations that may cause vibration to the area of our work must be completed prior to our arrival.
- Remove any free standing water from the areas and provide a sump pump if necessary for the duration of our works.
- Client or client's building contractor to provide at no extra cost to ourselves:
  - i) Free and direct access to the areas involved.
  - ii) Adequate supplies of water, lighting and power in the vicinity of the works.
  - iii) Suitable scaffold or platform if areas exceed 2.5 metres high.
  - iv) Skip or container to deposit waste and debris from works.

3) SURFACE PREPARATION (by Wing Preservation Ltd, if applicable)

- Brickwork/concrete to be bush-hammered/scabbled to leave sound roughened surfaces and provide a good key.
- Surfaces to be washed down and thoroughly wetted to remove loose matter and dust.

4) MATERIALS

- CEMENT — Portland Cement to BS 12.
- SAND — Washed salt-free sharp sand to BS 1199 and to a particle size as shown in Table one of that Standard, or to M zone as shown in BS 882.
- ADDITIVE — Waterproof tanking additive (can be supplied by Wing Preservation Ltd upon request).
- FINISH — Thistle Multifinish, if required.

5) TANKING (by Wing Preservation Ltd, if applicable)

Prepare the surface as previously mentioned, dilution of waterproof tanking additive usually 1:10 with gauging water.

First day: (a) *1st coat (splatter).* Mortar 1:1 with waterproof tanking additive diluted as instructed mixed to a sloppy consistency and applied vigorously covering the surface completely and lapping 200-300mm onto floor slab, to a thickness of 6mm.

(b) *2nd coat*. Mortar 1:1$^{1}/_{2}$ with diluted waterproof tanking additive applied as soon as the 1st coat has stiffened sufficiently (usually about 4-5 hours) to a thickness of 6mm. On completion apply a further splatter coat of the same mortar, mixed to a sloppy consistency with plain water, over the whole surface to form a key for the next coat.

Second day: *3rd coat*. Mortar 1:2½ with diluted waterproof tanking additive and be finished with a wood float, to a thickness of 6mm.

Where a four coat render system against high water pressure is required, then an additional 1:1½ coat is applied following splatter key coat on the second day, extending the process by another day. This final coat should be finished with a wood float to a thickness of 6mm.

Lap joints: Each coat should be stepped back 100mm from the finishing line of the previous coat to avoid butt joints, this is to ensure continuity of waterproofing.

FINISH PLASTER should be avoided where possible due to the hairline crack that occurs with the strong renders and condensation. Thistle Multifinish or Limelight finishing plasters to be applied where specified (not recommended for non habitable rooms).

6) FLOOR SCREED (Only where specified)

Prepare the surface as previously mentioned, dilution of waterproof tanking additive usually 1:10 with gauging water unless otherwise instructed.

- Prepare a grout composed of 1:1 mix of cement/sand with diluted waterproof tanking additive, gauged to a sloppy consistency and apply by brushing well onto the surface.
- A bonding coat consisting of a 1:1 cement/sand mix with diluted waterproof tanking additive is applied immediately to a thickness of 12mm and levelled with a trowel.
- The main floor coat is applied immediately to the bonding coat and consists of a 1:2½ cement to sand mortar mix with diluted waterproof tanking additive, laid to a minimum thickness of 25mm. This gives a minimum overall screed thickness of 37mm. This coat should be of a semi dry consistency and carried up to the wall to meet the final render coat. After compaction and when it has set sufficiently, it should be floated to a flat and even finish.

7) IMPORTANT NOTES

- Our specification for this work allows for the render coats to follow the contours of the structure. If 'plumb and dot' work is a requirement, this should be stated prior to our starting and our quotation will be adjusted.
- If our works are as client's instructions and partial, we cannot guarantee against or accept responsibility for dampness where our work terminates or beyond and reserve our right to extend the specification on a charged basis.
- There may be situations where, due to adverse conditions, we are unable to offer our usual guarantee. In such circumstances, our Tanking will result in a considerable improvement upon the conditions existing prior to our works, but may not be wholly watertight. Please note that we cannot accept responsibility for any seepage around service entries or other fixtures.
- In accordance with the Party Wall Act 1996 we advise that tanking a party wall may increase ground water and/or vapour pressure on a party wall and we cannot accept liability for any third party claim or damage.
- The fixing or refixing of items to the areas must not be carried out in a way that will pierce our Tanking. Our surveyors will advise, if required.
- All ground and subfloor timbers need isolation from masonry and adequate subfloor ventilation.
- Decorations should be left for several months to allow the drying out process and for the first twelve months should be regarded as temporary, using only water-based matt emulsion which allows the render to "breathe" and dry out. Do not apply lining paper at this stage. Any permanent decoration should be delayed at least twelve months after Tanking and then the use of materials which form a vapour barrier such as vinyl, tiling or other plastic surfaced wall papers, gloss paints etc., should be avoided. The use of water based alkaline tolerant paints is recommended and similar practices should apply to the floor.
- Please bear in mind that Tanking is a "wet trade" and can be messy. Carpets must be removed and floors fully protected. A builders clean by a professional cleaning company may be required.
- When removing old plaster/render, it is inevitable that a considerable amount of dust will be created. Not only is this dust likely to settle in the areas scheduled for Tanking, but also in other parts of the property. Therefore it is essential for furniture, furnishings and effects to be adequately protected. Such work is not allowed for by us and should be completed prior to our arrival on site. We cannot accept responsibility for any dust or damage caused.
- It is not the company's responsibility to ensure that our recommendations are implemented.
- The works are designed to stop lateral penetration of moisture, however additional measures may be required to deal with condensation, please refer to our Specification Sheet No. 6 and this may include the use of extractor fans & dehumidifiers.

SHOULD YOU REQUIRE ANY FURTHER INFORMATION, PLEASE DO NOT HESITATE TO CONTACT US.