KA Tanking Slurry

Professional penetrations and service detailing guide — installer-ready reference for sealing around pipes, steelwork, conduits, fixings and service penetrations while maintaining waterproofing and radon-resistant continuity.

Technical Helpline: 01872 879011

Use this guide as an on-site sealing checklist: clean and saturate the substrate, take slurry tight to each penetration, seal remaining gaps with KA Infinity Sealant and Adhesive, apply the second coat continuously over the detail, inspect for pinholes and maintain moist curing for 3 days.

1. Why Penetrations Are Critical

HIGHEST-RISK DETAIL

Penetrations are the **number one failure point** in tanking systems.

If not treated correctly, they allow:

- Water ingress
- Damp return
- Soil-gas movement (including radon)
- Condensation tracking
- Structural deterioration

From your 2026 TDS:

“Pay particular attention to service penetrations… these are the most common locations for discontinuity in a barrier system.”

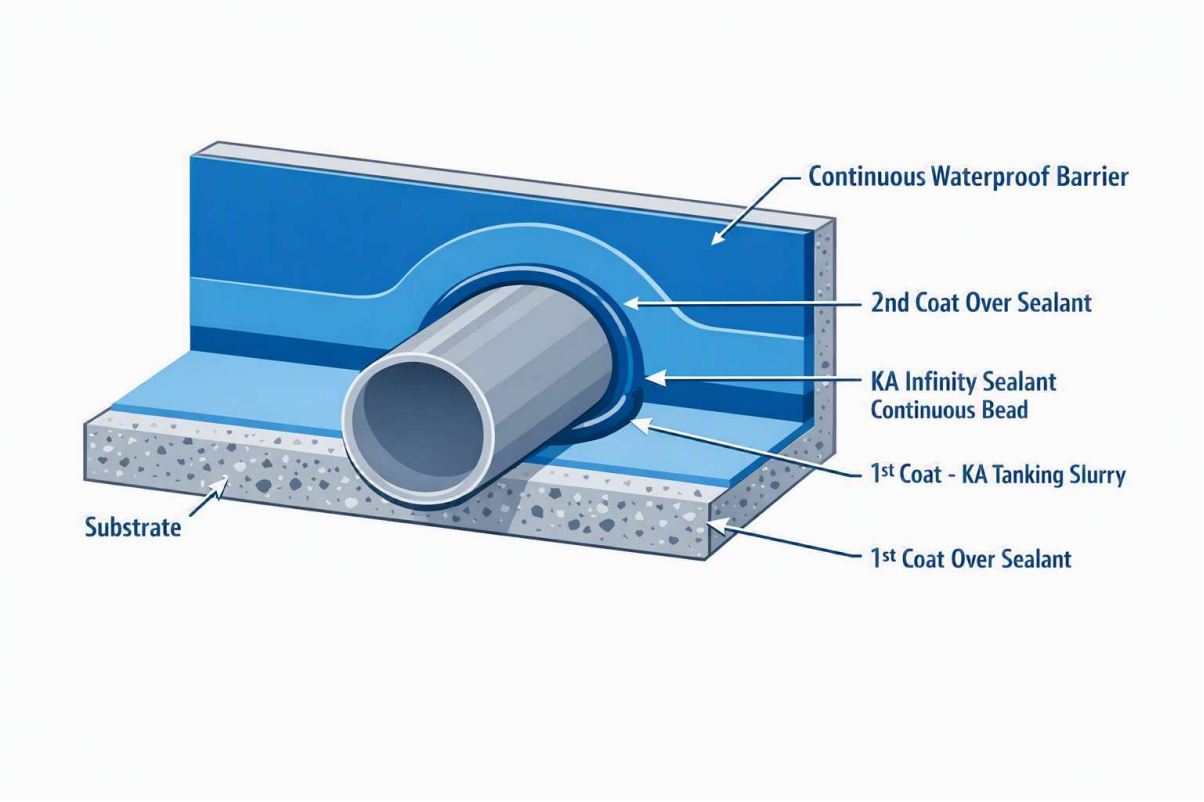

Illustration 1: Standard pipe penetration detail showing continuous slurry coating and sealant bead.

2. Types of Penetrations

IDENTIFY BEFORE DETAILING

Pipework

- PVC
- Copper
- Steel
- Drainage pipes
- Conduits

Structural Elements

- Steel columns
- Brackets
- Fixing plates
- Anchor bolts

Services

- Electrical conduits
- Cable trays
- HVAC penetrations
- Water feeds

Miscellaneous

- Weep holes (to be sealed only when appropriate)
- Sleeves
- Box-outs

3. General Rules for All Penetrations

MANDATORY RULES

1. **Substrate must be clean, porous, and SSD (saturated surface dry).**
2. **Slurry must be taken tightly up to the penetration.**
3. **Any remaining gap must be sealed with KA Infinity Sealant & Adhesive.**
4. **Both coats of slurry must fully cover the sealed area.**
5. **Inspect for pinholes, voids, or thin spots.**
6. **Maintain moist curing for 3 days.**

From your 2026 TDS:

"Tank up to the fixture and bridge any remaining gap with KA Infinity Sealant and Adhesive."

4. Standard Penetration Detailing Procedure

STANDARD METHOD

Step 1 — Clean and Prepare

- Remove dust, coatings, paint, bitumen, laitance.
- Ensure SSD condition.
- Repair cracks around penetration using 3:1 sand/cement mortar with KA-Bond SBR.

Step 2 — First Coat of Slurry

- Apply slurry tightly around the penetration.
- Use a detail brush to push slurry into the junction.
- Ensure full wrap-around coverage.

Step 3 — Seal Remaining Gap

- Apply KA Infinity Sealant & Adhesive around the penetration.
- Smooth with a gloved finger or jointing tool.
- Ensure no voids or air pockets.

Step 4 — Second Coat of Slurry

- Apply second coat at 90° to the first.
- Cover the sealant and surrounding area.
- Inspect for continuity.

Step 5 — Cure

- Maintain moist conditions for 3 days.
- Protect from frost, wind, and direct sun.

5. Pipe Penetrations: Detailed Method

PIPE SEALING DETAIL

A. Small Pipes (15–32 mm)

- Use detail brush for tight application.
- Apply Infinity Sealant in a continuous bead.
- Smooth sealant to form a fillet around the pipe.
- Apply second coat over the fillet.

B. Medium Pipes (32–110 mm)

- Install KA Fillet Seal around the base (25 mm × 25 mm).
- Apply slurry over fillet.
- Seal remaining gap with Infinity Sealant.
- Apply second coat.

C. Large Pipes (>110 mm)

- Cut a 15 mm × 45° chase around the pipe base.
- Fill chase with slurry.
- Seal gap with Infinity Sealant.
- Apply second coat.

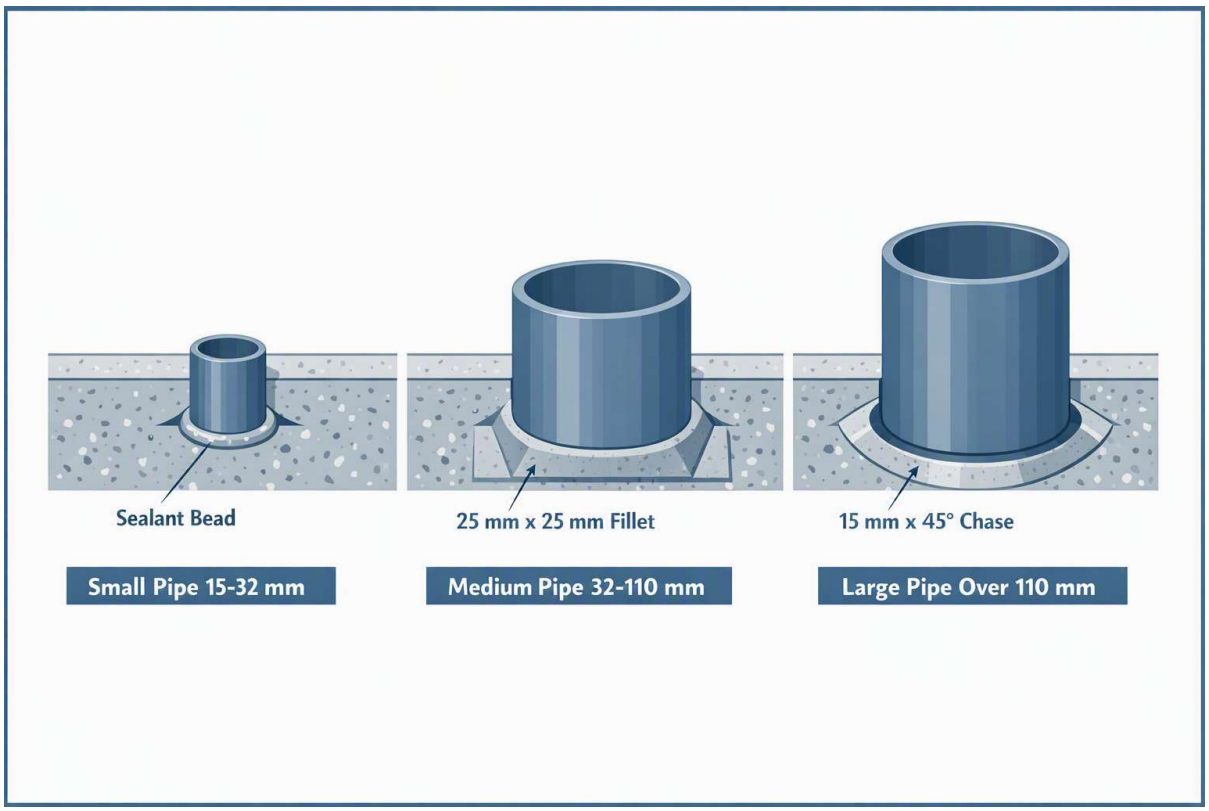

Illustration 2: Small, medium and large pipe penetration detailing options.

6. Steelwork Penetrations

MOVEMENT AND CORROSION RISK

Steel penetrations require extra care due to movement and corrosion risk.

Procedure

1. Clean steel thoroughly.
2. Apply slurry tightly to steel base.
3. Apply Infinity Sealant to bridge gap.
4. Apply second coat over sealant.
5. Inspect for cracking after cure.

Installer Tip: Use a margin trowel to push slurry under steel plates.

7. Electrical and Service Conduits

FIX BEFORE TANKING

Procedure

1. Remove dust and debris.
2. Apply slurry tightly around conduit.
3. Seal gap with Infinity Sealant.
4. Apply second coat.

5. Ensure no voids behind conduit.

Important: Do not leave conduits floating or unsupported — they must be fixed before tanking.

8. Fixings, Bolts and Brackets

SMALL DETAIL AREAS

Procedure

1. Apply slurry tightly around fixing.
2. Seal gap with Infinity Sealant.
3. Apply second coat.
4. Inspect for pinholes.

Installer Tip: Use a small brush to work slurry behind brackets.

9. Box-Outs and Sleeves

FULL INTERNAL COATING

Procedure

1. Fill void with SBR-modified mortar if required.
2. Apply slurry inside box-out.
3. Seal edges with Infinity Sealant.
4. Apply second coat.

Common Failure: Leaving the back of the box-out untreated — it must be fully coated.

10. Radon-Sensitive Penetrations

CONTINUITY CRITICAL

From your 2026 TDS:

“Continuity at penetrations should be treated as critical.”

Additional Requirements

- No gaps
- No cracks
- No thin spots
- No missed areas
- Full wrap-around coverage
- Infinity Sealant must be continuous
- Inspect each coat carefully
- Maintain moist curing for 3 days
- Avoid rapid drying

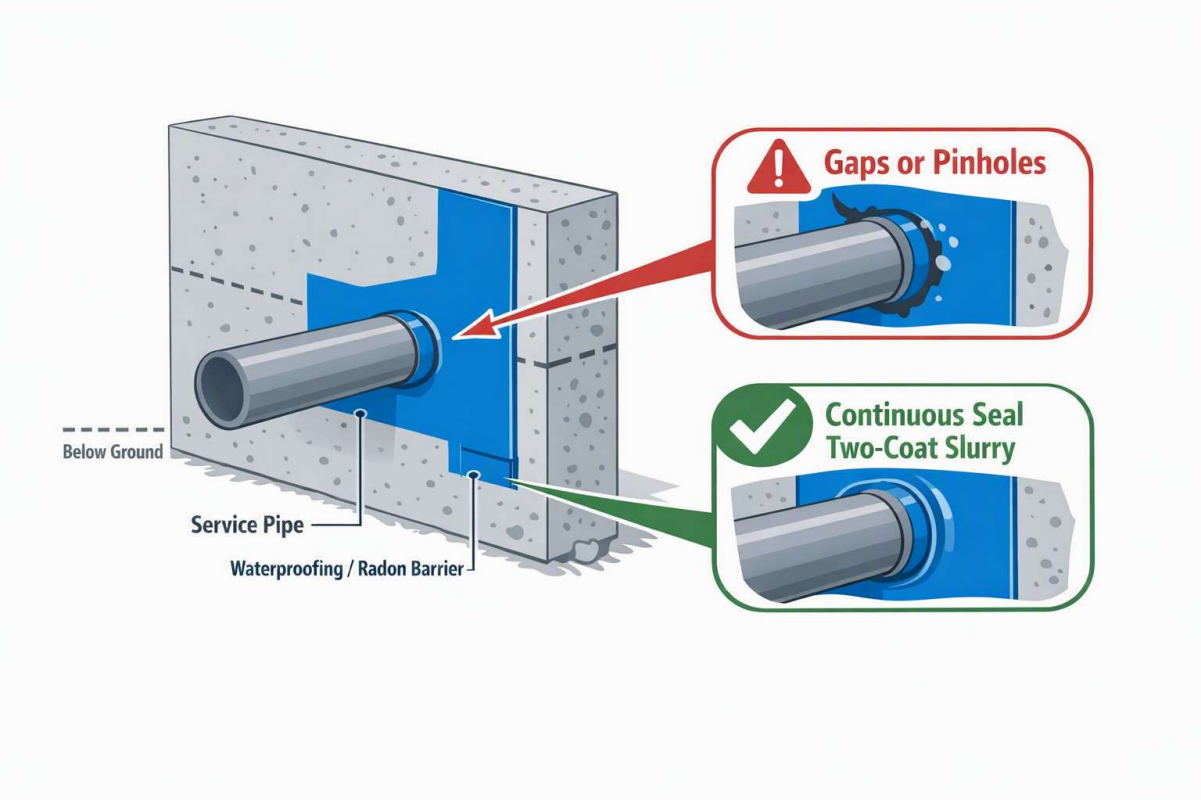

Illustration 3: Radon-sensitive penetration detail showing continuous barrier and inspection points.

- Document installation with photos

11. Quality Control Checklist

FINAL INSPECTION

Penetration QC

- Slurry tight to fixture
- Infinity Sealant applied
- No gaps
- No voids
- No thin spots
- Second coat fully covers sealant
- Moist cure maintained
- No cracking
- No delamination
- Full continuity achieved

Final Installer Sign-Off

Check Area	Required Standard	Confirmed
Substrate preparation	Clean, porous, sound and SSD before detailing	☐
Slurry coverage	First coat taken tight to every fixture and penetration	☐
Sealant bead	KA Infinity Sealant continuous, smoothed and free from voids	☐
Second coat	Continuous over sealant and surrounding area with no thin spots	☐
Steelwork and brackets	Gaps bridged, detail areas fully coated and inspected after cure	☐
Radon-sensitive details	No gaps, cracks, pinholes, missed areas or breaks in continuity	☐
Curing	Moist curing maintained for 3 days with no rapid drying	☐
Photo evidence	Installation photographed before concealment where required	☐

Sources: KA Tanking Slurry Technical Data Sheet 2026 Edition, KA Tanking Standard Specification including KA-Bond SBR, KA Infinity Sealant and Adhesive guidance, and KA Tanking Slurry COSHH SDS.