POLYZEN
WHERE SOVEREIGN SURFACES RULE

APPLICATION DATA SHEET
INTERIM

Terrace Waterproofing

SYSTEM FAMILY
Applied waterproofing / accessible flat roof

TYPE
Trafficked terrace (coba / membrane / liquid)

NOMINAL BUILD
per system (coba ~75 mm)

1. SCOPE & SYSTEM DESCRIPTION

This ADS describes POLYZEN's method for **terrace (accessible flat-roof) waterproofing** — an RCC roof that is walked on and exposed to sun and rain, so the system must waterproof, build the slope, and carry a durable wearing surface.

Delivered as a **POLYZEN Applied System**. Options range from the traditional **brickbat coba** (which waterproofs, insulates, builds falls and gives a wearing course in one) to polymer-modified cementitious, liquid PU / acrylic or torch-applied bitumen membranes laid under a protection / tiling course.

2. SUBSTRATE REQUIREMENTS

- Sound RCC slab, min 28 days cured; laitance and mortar droppings removed.
- Cracks and honeycombs cut and repaired with polymer-modified mortar; penetrations sealed.
- SSD-wet for cementitious / coba; clean and dry for membranes.

3. SURFACE PREPARATION

- Scabble / roughen the slab to a sound, open surface; remove all loose material.
- Repair cracks and honeycombs; form recessed 'khurra' drain outlets with reinforcing collars.
- Set out and confirm the finished falls before waterproofing — build the slope first.

4. ENVIRONMENTAL CONDITIONS

- Apply cementitious / coba to an SSD surface; apply membranes / liquids to a dry, primed surface.
- Avoid application before expected rain; cure coba wet; protect fresh work from foot traffic.

5. MATERIALS

Materials: delivered as a **POLYZEN Applied System** using a client-approved terrace waterproofing system — e.g. brickbat coba, polymer-modified cementitious (2-component), APP/SBS torch-applied bitumen membrane, or liquid-applied PU / acrylic elastomeric, with crystalline / integral treatment where specified, selected to suit the project specification and standards. Exact products, consumption, thickness and cure times are per the **selected material's data sheet**. No POLYZEN branded product is required for this system.

6. MATERIALS PREPARATION / MIXING

- Prepare the selected material per its data sheet (coba: waterproof cement mortar; PMC: powder into polymer to a lump-free slurry; membranes / liquids as specified).
- Mix full units; respect working time. Do not over-dose integral compounds (typically ≤2–3% by weight of cement, per IS 2645).

7. APPLICATION PROCEDURE

- **Junction detailing:** form a 50–75 mm coving (gola) fillet at all slab-parapet and vertical junctions; carry the system up a min ~300 mm parapet upstand terminated in a sealed chase ('chekka'); collar all pipe penetrations and drain outlets.

- **Brickbat coba route:** lay a base waterproof mortar coat → lay pre-soaked brickbats with 15–20 mm gaps → cure 24 h → grout the gaps → finish with a ~20 mm sloped topping floated smooth.
- **Liquid / PMC route:** prime → apply coat 1 with reinforcing mesh at all details → apply coat 2 at right angles to the specified DFT (typically ≥1.5 mm) → protection screed → tiling.
- Build all falls into the topping / screed toward the outlets.

8. COVERAGE, LAYERS & FALLS

- Coba topping ~20 mm over brickbats; PMC / liquid coats and DFT per the selected system's data sheet.
- Falls 1:80–1:100 to drain outlets; no ponding pockets.
- Reference standards: IS 3067, IS 1346, IS 2645 (integral); ref. ASTM D5957 (reference only; confirm project spec).

9. CURING & RETURN TO SERVICE

- Brickbat coba: cure ~14–15 days.
- PMC: ~3–7 days; liquid PU: light traffic ~24–48 h, full ~7 days — per the selected system's data sheet.

10. FINISHING, PROTECTION & OVERLAY

- Protection / slope screed + china-mosaic, tiles or IPS wearing course over membrane systems.
- Sealed parapet chase, drain collars and pipe penetrations; positive falls, no ponding.

11. TESTING & QC CHECKPOINTS

- **Flood (ponding) test 48–72 h** (min 24 h) with ~50–100 mm head; inspect the soffit for leakage before tiling.
- Check DFT / coba thickness, coving and detail reinforcement, and adhesion.
- Confirm falls and outlet drainage under the test water.

12. DO'S & DON'TS

Do

- Build the slope BEFORE waterproofing — ponding is the #1 cause of failure.
- Soak brickbats overnight before laying.
- Cove all junctions and carry the system up parapet upstands.
- Flood-test before laying the wearing course.

Don't

- Don't leave a membrane exposed under foot traffic — always protect / tile.
- Don't over-dose integral waterproofing compound.
- Don't create back-falls or ponding pockets.
- Don't tile before a successful flood test.

13. MAINTENANCE

- Keep drain outlets and khurras clear; inspect the parapet chase and coving periodically.
- Repair cracked tiles / topping promptly to protect the membrane below.
- Re-coat exposed liquid systems as they weather.

14. HEALTH, SAFETY & ENVIRONMENT

- Follow the selected material's SDS — hot bitumen (torching), solvent primers and PU / isocyanate systems each carry specific hazards.
- Provide PPE, ventilation and fire precautions for torch-on work; enforce working-at-height / edge-protection controls on terraces and parapets.
- Control spills and prevent uncured material entering drains.

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Disclaimer: this interim Application Data Sheet describes POLYZEN's typical application methodology for this class of system and is provided in good faith. It is a brand-flexible application guide; exact products, consumption, thickness, test durations and cure times are governed by the selected material's data sheet and the project specification. Figures shown are typical/reference values from common Indian and international practice (IS/BS/ASTM). POLYZEN reserves the right to revise this document; the latest version supersedes all previous.