

Subject: Guidelines for fixing seepage complaints.

Key words: water proofing, seepage, leakage, crack fill, epoxy, zycosil, silicone.

Several complaints have been received from customers about seepage in the last one month. A standard guideline is being issued for attending to such complaints.

Sl No	Description of seepage	Probable cause	Guideline for correction
1.	Seepage in headroom – roof	Improper water proofing, especially under water tank	Chip and redo water proofing. 2” to 3” gulta to be made.
2.	Seepage in headroom – roof	Slope of flooring to rainwater pipe is incorrect	Chip it and redo water proofing. Rainwater pipe must be at bear slab level.
3.	Headroom – seepage from walls	4” brick layer not made near opening. Rain water spilling from opening instead of a rainwater pipe.	Lay 4” brick layer and water proofing touchup required.
4.	Seepage from terrace	Improper water proofing.	Chip and redo water proofing. Can be restricted to an area of not less than 50 sft.
5.	Seepage from terrace	Slope of flooring to rainwater pipe is incorrect	Chip and redo water proofing. Can be restricted to an area of not less than 50 sft. Rainwater pipe must be at bear slab level.
6.	Seepage from terrace	Mortar is crack or chipped.	Thickness of mortar may be more than 3” – lay a layer of M15 CC using baby chips – redo water proofing. Restrict thickness of mortar to less than 2”. OR If thickness of mortar is less than 2 ½” – chip – redo water proofing. 14 days curing must – with ponding.
7.	Seepage from terrace	Mortar intact. Slope correct	Apply 2 coats of MYK epoxy over the affected area – not less than 15 sft.
8.	Seepage from walls	Crack in walls	Crack filling with Roff crack fill after making groves with cutting blade of ¼” width and ½” depth. Larger cracks between RCC & brick work – make a groove of 1” x 1” – apply bonding agent – fill with 1:6 mortar + reckron + IWC /plastisizer. Optionally, 2 coats of MYK epoxy can be applied over affected area on the external side.

9.	Seepage from walls	Micro cracks in plaster or on the wall. No visible cause of seepage.	Option -1: Apply 2 coats of MYK epoxy over affected areas on the external side OR Alternately apply one coat of Zycosil (dilute 1:15 – 1 liter over not more than 600 sft – spraying preferred). Option -2: If final painting is completed – apply one coat of Zycosil (dilute 1:15 – apply over not more than 600 sft – spray preferred) – on entire area on one side – to avoid colour variation. Option -3: If final coat painting is not completed – optionally – smooth finish can be done on entire wall using Birla wall care putty.
10.	Seepage from walls	Hole packing of pipe	If packing is improper – redo hole packing – apply 2 coats MYK epoxy around hole packing – 2’ dia circle. For small holes around pipes/gova – fill with Birla wall care putty - apply 2 coats MYK epoxy around hole packing – 2’ dia circle.
11.	Seepage from walls	Plastering behind pipe or valve is not proper	Remove pipe, re-plaster. Pipe can be refixed away from wall by using ½” x 2” x 4”/6” salwood behind clamps. Apply 2 coats MYK epoxy – as required. Note – in most places gaps can be seen behind valves – follow above procedure.
12.	Seepage from walls	Water entering into electrical points	Re-fix junction boxes covers or electrical fixtures by filling with general purpose silicone (Dr. Fixit). Gaps around electrical fixtures/junction boxes can also be filled with Birla wall care putty. Apply 2 coats MYK epoxy – only if required.
13.	Seepage from walls	Parapet is not plastered properly. Tor steel is exposed.	Cut tor steel with angle grinder – ½” below parapet level. Chip and re-plaster. Small gaps can be filled with Birla wall care putty. Apply 2 coats MYK epoxy – only if required.

14.	Seepage from walls	Chajja slope is not correct.	Make red patti on chajja.
15.	Seepage from walls	Plastering around chajja is not correct.	Chip and re-plaster. Small gaps can be filled with Birla wall care putty.
16.	Seepage from walls around windows	Windows improperly fixed	Remove and refix window – grind with angle grinder for proper finish. Small gaps around window can be filled with Birla wall care putty/silicone. If window is outside the plain of the wall – send photographs for MDs suggestions/correction. After correction 2 coats MYK epoxy can be applied, if required. Check if holes are there in the bottom track of the windows.
17.	Seepage near skirting	Gaps between CP fitting and tiles	Remove all CP fittings and refix after covering gaps between CPVC pipe and tile with white cement and/or Birla wall care putty. Screeding must be done for new apartments and villas upto a height 9” on external side of bathroom.
18.	Seepage near skirting	Tile grouting and nani trap	Nani trap must be thoroughly plastered with kalai finish. Check with torch. Remove cover between tiles on the floor and re-grout.
19.	Seepage near skirting	Crack CPVC pipe or improper jointing of PVC pipe	Stop usage of bathroom for 1 to 2 weeks. If leakage completely stops then pipes are broken or improperly fixed. Tiles have to be broken to rectify problem.
20.	Seepage from roof of bathroom	Improper packing in core cutting	Repack core cutting. Grout if required.
21.	Seepage on external wall of villas – one or two feet above setback level	Improper drainage of rainwater into lawn.	Provide 3 or 4” PVC pipe under portico/pavers/ utility for draining water from setbacks to lawn.
22.	Seepage on external wall of villas – one or two feet above setback level	No apparent cause	Apply Birla wall care putty upto 2’ height and repaint. In finished villas – minor seepage – apply 2 coats of Zycosil (dilute 1:15 – apply over not more than 600 sft, spray preferred).

Note:

1. Use Birla wall care putty for all small correction works in place of cement mortar. If thickness of wall care putty exceeds ¼” mix with sand in ratio of 1:2 or 1:3, curing not required.

2. Villas – Plastering must extend to 6” below setback level to avoid seepage. For that proper leveling after brick work is mandatory.
3. Curing with ponding must – 14 days – for terrace and headroom water proofing.
4. Zycosil is a transparent crystallization agent. Dilute 1:15 for walls and 1:10 for terrace. Apply 1 coat – preferable by spray. On liter should cover not more than 600 sft with repeated spraying. Do not mix with cement mortar or paint and apply.
5. MYK Epoxy – Its a white thick layer of epoxy (like araldite). Dilute as per specifications. Apply 2nd coat after a gap of 1 day.
6. Dr. Fixit Silicon (no. ____) should be used for general purpose sealing between metal/wood/plastic and civil work.
7. Pressure grouting to be used wherever leakage is in concrete, especially, in joints between beams, columns, slabs, sumps, basement retaining walls, OHT, swimming pool, etc.

Cost and coverage

Sl. No.	Item	Usage	Cost inclusive of GST	Coverage
1	Birla wall care putty	General purpose	Rs. 743/- bag of 20 kg.	150 sft per coat per 20 kgs.
2	Zycosil	Occasional use on external walls and terrace	Rs. 1,650/- per liter. Rs. 34,000/- per 20 liters	Not more than 600 sft per liter.
3	IWPC – Fosroc WL	Mixing in mortar. 160 ml per bag of cement.	Rs. 1,950/- for 20 ltrs.	125 bags per 20 liters.
4	IWPC – Dr. Fixit	Mixing in mortar. 200 ml per bag of cement.	Rs. 1,850/- for 20 ltrs	100 bags per 20 liters
5	Dr. Fixit Silicone Gel	For filling gaps not more than 6mm between metal/wood/plastic and civil work	About Rs. 150/- per tube	NA

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