



LIFE GREEN SYSTEMS
Green Cities | Clean Waters | Better Life

ENHANCING URBAN ECOLOGY



Green Cities.
Clean Waters.
Better Life.™

projects with purpose

Life Green Systems offers urban ecology solutions like landscaping, vertical gardens, rooftop gardens, contemporary water features & subsurface drainage system to uphold & maintain urban lifestyle...

WATER PROOFING TECHNOLOGY

This case study discusses Life Green Systems' waterproofing system adopted in a rooftop area at client site in Haryana, India. To know more about Life Green Systems, visit: www.lifegreensystems.com

CASE STUDY

BY

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When record-breaking rain storms struck in Northern India every year, the dire need of adapting innovative green technologies has come up in order to restore and reestablish the beauty of architecture and building structure.

Client Requirement:

They were facing acute water leakage problems with the existing waterproofing and roof garden. Life Green Systems were asked to look at the problems and proposed an innovative solution that can eradicate the problem permanently and add aesthetic beauty to the area.

Total Area: 7000 square meter.

Solution offered:

The insulation was installed in layers and mechanically fixed in place to follow the curve of the roof. APP based waterproofing has been executed. It's a blend of Glass Fiber and Koltaar solution.

The completed roof not only looks pleasing, but also adds to the environmental aspirations of the project by benefiting from Life Green Systems' green credentials.

Life Green Systems Drainage Cell will also function as a protective membrane for waterproofing on concrete slabs, walls and provide ventilation for concrete slabs, alleviating heat induced stress and cracking. In addition, the drainage cells feature water storage cups used for passive irrigation and due to the structural design of the cell, a void space is created, providing aeration and promoting growth for root systems.

The design solution includes:

- Demolishing of existing roof garden and water proofing
- Leveling of roof surface using PCC of required thickness
- APP based waterproofing of the entire area including 600 mm vertical
- Leakage testing with water filling for 48 hours
- Installation of Drainage cells 30 mm
- Installation of Geotextile
- Filling lightweight planting media
- Laying stones & planting plants as per landscape design

Leveling of Roof Surface by using PCC at required thickness



Site after completion of Waterproofing



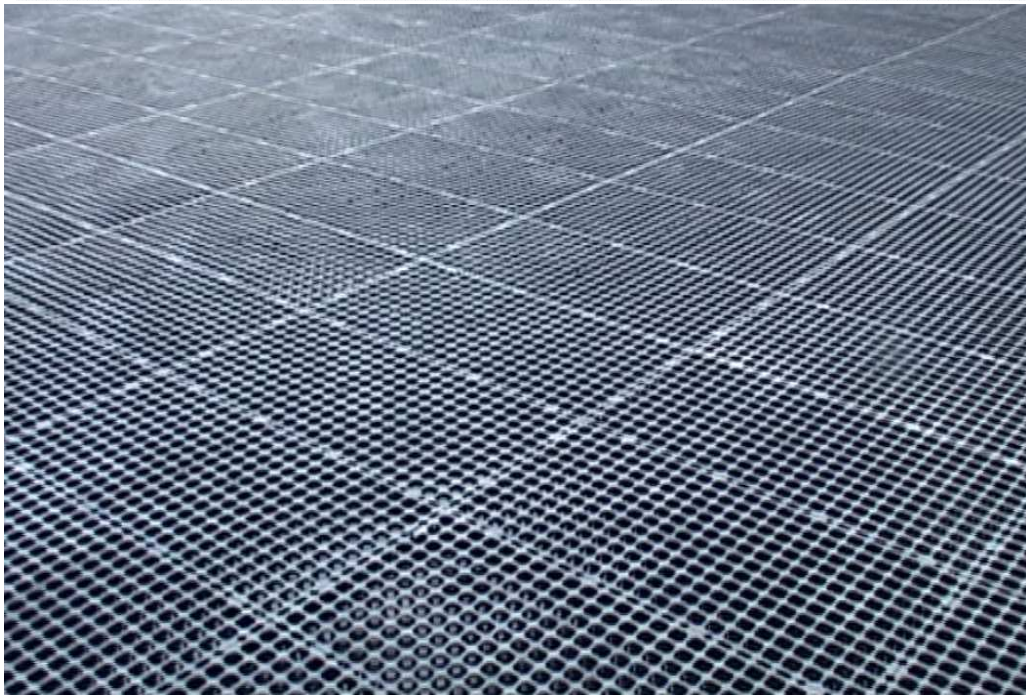
Leakage testing with water filling for 48 hours



Installation of LGS Drainage Cells of 30MM



After Installation of LGS Drainage Cells of 30MM



Laying of Geotextile



Wrapping of Geotextile



Filling lightweight planting media



Laying stones & planting plants as per landscape design



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