

Waterproofing Can Save the Day

The durability of structures and health of the inhabitants can be enhanced by simply paying attention to the five entry points of water seepage



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IF YOU THOUGHT THAT only our skin needed protection, think again. With the scorching sun and rising temperature taking a toll on our health, even our houses are under the same threat. The walls that protect us constantly bear the brunt of scalding heat outside during summer and need a care and attention as well.

Natural Effect

The increase in the number of greenhouse gas emissions, including CO₂, generated by our daily activities every year, has resulted in the changed climate patterns globally. This phenomenon changes temperature, pollution, relative humidity, wind patterns all over the world, and causes

high temperature. India has also seen a considerable amount of uncertainty in the form of sudden rain showers and flash floods, snowfall, and heat waves because of global warming. Extreme heat, cold, and rain events already have had a significant impact in India especially the northern region, where summer temperatures are historically high. And every year they have been breaking their own records. Not only does this affect our life and health, it also has a significant impact on the lifespan of our structures. The country has been experiencing high temperatures and intense heat waves. These extreme climatic conditions are playing havoc with the concrete structures in our country.

Quality Control

Though concrete structures, built during the first half of the last century, have generally proved to be durable, constructions in the latter half have started showing signs of early damage. In several cases the damage is evidently visible within five or ten years of construction. This problem has aggravated in the past few years owing to the increase in number of buildings catering to the growing population, especially in the urban areas. Factors like population explosion, increasing demand for housing and quality infrastructure has given impetus to the construction sector in the country. Cracks, leakages, falling parapets, wet walls are some

damages that a major chunk of housing segment faces. In order to provide mass housing, aspects like durability and protection are often compromised in new constructions, leading to costly repairs of the building within few years of construction. In most cases, the root cause has been lack of proper waterproofing or no waterproofing at all.

Core Problem

When a concrete surface is exposed to high temperatures, the concrete expands and contracts. Concrete is not stretchable and flexible. As a result of this, the surface starts cracking. Due to such exposure to harsh weather, the exteriors and roofs of structures develop cracks. These cracks make it easy for the water to enter through easily, causing leakage. This leakage and cracks not only affect the aesthetics of the building but also weaken the structure, leading to falling slabs, persistent dampness on walls, water seepage, weakening of pillars and collapsing walls.

Rapid Construction

Another point to be noted is that there is an upswing in the construction activities across the country during the summer period; this is primarily because it becomes cumbersome to carry on construction activities during monsoons.

Due to this phenomenon, one tends to not give adequate time towards the setting of materials, therefore

deteriorating the quality of construction in the long run. This, along with the factors mentioned earlier, is one of the many reasons why leakages occur in homes, through the five points of water entry which are foundation, bathrooms and other wet areas, external walls, concrete water tanks, and roofs.

Take Care

Traditionally problems like insulation and waterproofing were dealt with by conventional systems like brickbat coba, lime terracing, and mud fuska. But the problems have persisted and reoccurred in a matter of few months of applying the solution based on the above material due to non-availability of these materials and improper construction techniques. This is because these materials are non-elastic like concrete and often crack because of exposure to heat. This results in the repetition of same expensive procedures almost after every



two years. It is economically unviable and also takes a toll on the structure's life in the long haul.

With the advent of new technology, and advance techniques, there are plenty of new age solutions available in the market. What's more, these solutions are eco-friendly. Along with

durable waterproofing solutions, these products also provide a great amount of insulation, reducing surface temperature up to 12° Celsius. So say bye to repairs and leakages! It's another way to stay cooler during the summer.

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