

SMART, SUSTAINABLE, AND STYLISH The Next Generation of Tiles

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In the world of home design, tiles CNG as a support, but we are striving technologies extends beyond the overall look and feel of a space. play an indispensable role, often to develop additional resources. In sustainability efforts. Swapan operating as the unsung heroes that silently breathe life into living spaces. Within Bangladesh, the ceramic industry, particularly the tiles sector, has witnessed remarkable growth, solidifying its position as one of the country's fastest-growing manufacturing industries. This expansion can be attributed, in large part, to the everevolving preferences of individuals, like RAK Ceramics are introducing which continuously inspire a myriad of innovative advancements within the tile industry. Moreover, but also produce high-quality tiles. the integration of cutting-edge technologies has revolutionized the functionality, sustainability, and visual appeal of tiles, further propelling their significance in the domain of home decor.

SUSTAINABLE PRODUCTION **PROCESS**

With the advent of modern achieve the same output with only technologies, the manufacturing 10 liters of gas input." Rahman process in the tile industry has also highlights their commitment undergone significant changes to to exploring the use of recycled prioritize sustainability and reduce materials for tile production in energy consumption. Traditionally, tiles were fired in gas heaters within kilns, but the current low pressure of natural gas in our country has posed a threat to this gasdependent approach. In response, tile companies are actively seeking reliance on gas.

Mohammad Ashraful Haque, demand for environmentally

DGM of Sales at Akij Ceramics Ltd., friendly products. shares, "Initially, we had to rely on Moreover, we have plans to invest soon be implemented."

On the other hand, companies globally acclaimed machines that are not only efficient S M Arafatur Rahman, DGM of Marketing & Communication at RAK Ceramics, explains their focus on reducing gas consumption, stating, "Previously, our machinery generated 200 liters of output from 100 liters of gas input. However, with advanced technology, we can the future, ensuring a sustainable **STYLE REVOLUTIONS** approach.

emphasizes the importance of all

The influence of cutting-edge heat and exploring other energy the rapid development of the tile of the pressure on natural gas. implementation of automated machinery. This transition has led

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with robots taking on a majority of the work.

array of styles and designs available. aesthetics. However, they are now a thin coating of glaze composed

recognized as an integral part of of ceramic compounds that interior design, capable of elevating activate upon exposure to UV rays

To cater to the growing demand addition to utilizing coal, we are Kumar Sikder, Associate Professor for diverse and visually appealing exploring the conversion of wood of the Department of Ceramics tile options, the market now offers waste into fuel. By regenerating at Dhaka University, commends a wide range of glazes. From mirror glaze and sugar glaze to non-glaze sources, we can alleviate some industry, particularly through the or matte finishes, there is a plethora of choices available. Thanks to modern high-tech printing in solar energy support, which will to reduced reliance on manpower, technology, tile companies can now offer an infinite variety of outlooks with impeccable finishes.

Gone are the days when limited options restrained homeowners. Nowadays, tiles can mimic the textures of wood or create the elegant look of marble, allowing individuals to select styles that seamlessly align with the aesthetic of their entire house. The availability of such a vast range of options empowers homeowners to fully customize their living spaces preventing slips even on soapy and bring their design visions to and wet surfaces. These tiles are

SUPERIOR TILES

With the advent of modern tiles. Furthermore, heavy-duty tiles technology, tiles in the Bangladesh market are embracing advanced functionalities through innovative In addition to the pursuit of glazes. In today's health-Md. Bayazed Bashar, Head of innovation, the tiles industry has conscious era, where hygiene takes Operations at DBL Ceramics Ltd, been dedicated to enhancing the precedence, new technology has introduced anti-microbial tiles that industry players incorporating eco- Previously, tiles were often not only sanitize and disinfect but friendly and sustainable practices overlooked as a mere protective also inhibit the growth of bacteria, alternatives to mitigate their into their production processes layer for the floor, receiving safeguarding surfaces from to meet the growing consumer minimal consideration in terms of contamination. These tiles feature

from indoor lights and sunlight, effectively oxidizing microbes and bacteria on the surface.

Dr. Muhammad Hasanuzzaman, Associate Professor of the Department of Nanomaterials and Ceramic Engineering at BUET, emphasizes the long-term hygiene benefits of anti-microbial or antibacterial glazes. He explains, "Even when using disinfectant cleaners, their effects may only last up to eight hours. Beyond that, the growth of bacteria tends to increase. However, with anti-microbial or anti-bacterial glaze, we can ensure sustained hygiene."

Additionally, there are antiskid tiles available in the market that offer moisture resistance, commonly used in bathrooms in combination with anti-microbial designed to withstand wear and tear are also available, catering to specific requirements.

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