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Preparing NewspaperWood with Fire-Resistant Properties

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Abstract: This study focuses on preparing NewspaperWood, an eco-friendly material made from recycled paper, by integrating fire-resistant properties to improve its safety in construction applications. NewspaperWood, known for its aesthetic appeal and sustainability, poses challenges regarding flammability. To address this, the research explores various chemical treatments and additive materials that can effectively increase its fire resistance without compromising its structural and visual qualities. Experimental methodologies involved applying different fire-retardant Chemical to the NewspaperWood during its production process. Subsequent tests assessed the material's ignition time, flame spread, and smoke production. Results indicated that specific treatments significantly reduced flammability while retaining the desirable properties of Newspaper Wood, such as its unique texture and lightweight nature. The findings suggest that with proper enhancement, Newspaper Wood can be a viable option for interior applications and potentially for exterior uses, thus broadening its market potential. This research underscores the importance of developing sustainable materials that meet safety standards, contributing to advancements in green building practices and offering a safer alternative to traditional wood products. Overall, the study provides a foundation for further exploration into the application of fire- retardant technologies in environmentally friendly materials.

Keywords: NewspaperWood, eco-friendly, fire- resistant, construction, flammability, treatment, sustainability

