

# Basalt Rock Fibre

**Yash Bhardwaj**

B. Tech, Civil Engineering Student

Arya College of Engineering and Research Center, Kookas , Jaipur, Rajasthan

**Abstract:** *Basalt rock fibre (BRF) is an emerging material in the field of construction, automotive, aerospace, and other industries due to its exceptional mechanical, thermal, and environmental properties. Derived from volcanic basalt rocks, BRF offers significant advantages over traditional materials like glass and carbon fibres, such as high tensile strength, resistance to high temperatures, and low environmental impact. This research paper aims to explore the production process, properties, and applications of basalt rock fibre, providing a detailed review of its current uses and future potential. Additionally, the paper investigates the challenges and barriers to the broader adoption of BRF, particularly in comparison to more established fibres. The findings highlight BRF's potential as a sustainable alternative to synthetic fibres and its role in advancing environmentally friendly technologies.*

**Keywords:** Basalt rock fibre.

