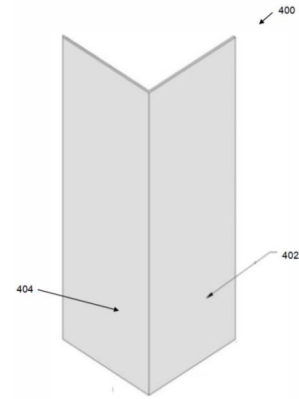




GRANTED

(IN501322)

System and method of reinforcement of masonry structures with FRP laminates



NEED

Traditional masonry columns often suffer from structural weaknesses due to non-chamfered edges. These weaknesses lead to cracks, reduced load-bearing capacity, and premature failure. A new reinforcement method is required to strengthen these vulnerable areas.

TECHNOLOGY OVERVIEW

This patent introduces a reinforcement system for masonry columns, using fiber-reinforced polymer (FRP) sheets to cover non-chamfered edges. The system enhances the structural strength of masonry columns by applying FRP corner sheets on edges. This method improves the durability and load-bearing capacity of masonry columns.

TECHNOLOGY KEY FEATURES

FRP sheets reinforce masonry columns by enclosing non-chamfered edges, enhancing strength. Corner sheets provide additional edge support. The system is adaptable based on column strength requirements.

[Read more here](#)

MARKET ANALYSIS

The global construction market is expected to grow at a CAGR of 4.6%, reaching \$15.9T by 2033 (source: GlobalData). Increased focus on infrastructure resilience and earthquake-resistant buildings drives demand for reinforcement solutions.

Target Industries

1) Construction and infrastructure firms, 2) Civil engineering and architectural design firms, 3) Suppliers of building materials and reinforcement technologies.

AT A GLANCE

- SDG 9 (Industry, Innovation, and Infrastructure), SDG 11 (Sustainable Cities and Communities)

Technology is available for licensing/ co-development.

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