

# Study on Comparison between Ordinary Concrete and Rubberized Concrete'

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**Abstract:** *The concrete is an important part of the construction industry. Tyre waste is a major threat to the environment and dumping in landfills can lead to various problems such as fire, breeding ground, land waste, etc. Therefore, if tyre waste can be used in the construction industry, it will help reduce pollution. This can help reduce construction costs. For M20 grades of concrete, rubber fiber piece is added in different percentages [0%, 5%, 7.5%, 10%,] of fine aggregates. Features like, Compressive Strength and compare with control mix of M20 concrete. In terms of compressive strength increases significantly with 10% substitution..*

**Keywords:** Rubberized Concrete, Sand Replacement (0 % ,5 % ,7.5 % ,10 %) Workability, Compressive Strength etc.

## REFERENCES

- [1]. Ayman Moustafa and Mohamed A. ElGawady "Dynamic properties of high strength rubberized concrete" , Missouri University of Science and Technology , 2007
- [2]. Mohamad Syamir Senin, Shahiron Shahidan, Siti Radziah Abdullah, Nickholas Anting Guntor & Alif Syazani Leman.
- [3]. Mohamed Elchalakani, Tarek Aly & Emad Abu-Aisheh," Mechanical properties of rubberized concrete for road side barriers", Australian Journal of Civil Engineering ,2016
- [4]. F. Hernandez-Olivares, G. Barluenga , "Fire performance of recycled rubber-filled high strength concrete", Cement and Concrete Research , 2003
- [5]. Dr. M. R. Wakchaure ,Mr. S. S. Channa," Crumb Rubber in Concrete: Static and Dynamic Evaluation", International Research Journal of Engineering and Technology [IRJET] ,2018
- [6]. Gabriel Oprisan, Ioana-Sorina Entuc, Petru Mihai, Ionut-Ovidiu Toma, Nicolae Taranu, Mihai Budescu, Vlad Munteanu , " Behavior of Rubberized Concrete Short Columns Confined , 2019
- [7]. North East Recycling council.
- [8]. MRAI- Material Recycling Association of India.
- [9]. Gabriel Oprisan , Ioana Sorina Entuc ,Petru Mihai. IonutOvidiuToma . NicolaeTaranu , Mihai Budescu , Vlad Munteanu "Behavior of Rubberized Concrete Short Columns Confined by Aramid Fibre Reinforced Polymer Jackets Subjected to Compression" , Hindwani Carlos Chastre ,2019