

“BUM629” Special Hybrid Reinforcement Materials for Mega Structures

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Abstract : In the civil construction steel and concrete plays a different role but the same purposes dealing with the design of structures that support or resist loads. Concrete has been used in construction since long time from now. Being brittle and weak in tension, concrete is always reinforced with steel bars for the purposes in beams and columns etc. The paper deals with idea of special designed 3D materials which we named as “BUM629” to be placed/anchored in the structural member and mixed with concrete later on, so as to resist the developments of cracks due to shear failure , buckling,tension and compressive load in concrete. It had cutting edge technology through Draft, Analysis and Design the “BUM629”. The results show that “BUM629” has the great results in Mechanical application. Its material properties are design according to the need of structure; we apply the material such as Mild Steel and Magnesium Alloy. “BUM629” are divided into two parts one is applied at the middle section of concrete member where bending movements are maximum and the second part is laying parallel to vertical bars near clear cover, so we design this material and apply in Reinforcement of Civil Structures. “BUM629” is analysis and design for use in the mega structures like skyscrapers, dams and bridges.

Keywords : BUM629, magnesium alloy, cutting edge technology, mechanical application, draft, analysis and design, mega structures

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