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## **Review Study on Dynamic Behavior of RCC Circular Elevated Water Tank with Baffle Walls**

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Abstract: An elevated RCC water tanks are very important components of lifeline and are considered to be the critical elements in municipal water supply. The water tanks get heavily damaged during earthquakes due to sloshing effects. This fact necessitates to focus elevated water tanks by provision of baffle walls inside the tanks. This paper focuses on study of behavior of water tanks provided with the baffle walls by literature review. The study concludes that use of horizontal as well as vertical baffle walls inside the tank facilitates in reducing the responses viz., displacement and base shear. Further, by increasing height of vertical baffle walls causes reduction in the displacement by an approximate value of 15–20 %. There is a good scope to study the behavior of RCC elevated water tank considering the provision of annular horizontal baffle walls by positioning them at varying depths along the height of the tank

Keywords: RCC elevated water tank, Dynamic behavior, Sloshing effect, Annular horizontal baffle walls



