

Case Study: Gleeds

Cross-sector Savings

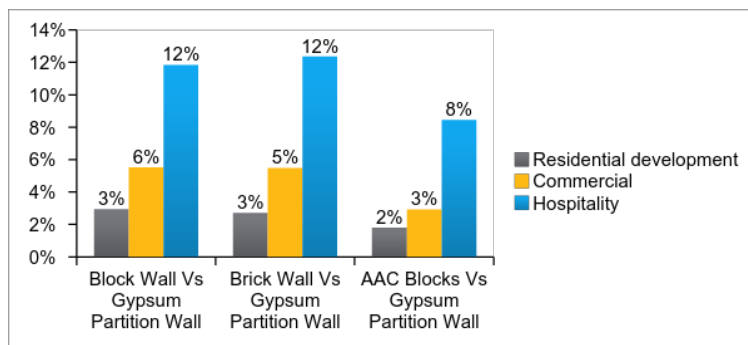
Gleeds international management and construction consultants undertook a review of the use of modern methods of construction in India on behalf of Saint-Gobain Gyproc.

By making detailed analytical comparisons of the impact of the weight and time reduction that can be achieved through the switch from brick, concrete and AAC (autoclaved aerated concrete) block walls to drywall systems, Gleeds were able to demonstrate significant total project cost and programme savings.

The analysis was carried out across three different project types:

Options	Cases Considered:
<p>Option - 1 Considering total structural costs of building designed for a traditional beam slab system using external walls made of 200mm thick Block wall and Internal walls made 100mm thick block wall Note: The hospitality development have internal walls a combination of 200mm and 100mm partition walls</p>	<p>Residential Development: This residential development consists of 2 common basements and 4 towers of ground floor and 25 typical floors. The total no of units is 400 The total BUA of the development is 11,60,955 sqft</p>
<p>Option - 2 Considering total structural costs of building designed for a traditional beam slab system using external walls made of 230mm Brick wall and Internal walls made 115mm thick brick wall Note: The hospitality development have internal walls a combination of 200mm and 100mm partition walls</p>	<p>Commercial: This commercial development consists of a lower and upper basement, ground and 11 typical floors. The total BUA of the development is 10,41,396 sqft</p>
<p>Option - 3 Considering total structural costs of building designed for a traditional beam slab system using external walls made of 200mm thick Block wall and Internal walls made 100mm thick AAC block wall Effective reduction in steel on the entire project estimated to be 3% from the traditional Block work design Note: The hospitality development have internal walls a combination of 200mm and 100mm partition walls</p>	<p>Hospitality: This hospitality consists of a basement floor, ground floor, mezzanine floor, first floor and 6 typical floors. The total BUA of the development is 2,69,000 sqft</p>
<p>Option - 4 Considering total structural costs of building designed for a traditional beam slab system using external walls made of 200mm thick Block wall and Internal walls made 75mm thick gypsum partition walls Effective reduction in steel on the entire project estimated to be ranging from 5% -10% from the traditional Block work design. In the below study reduction in steel taken as 6% Note: The hospitality development have internal walls a combination of 200mm and 75mm gypsum partition walls.</p>	

The calculated Capex savings were:



The savings made to installation time were calculated as:

