

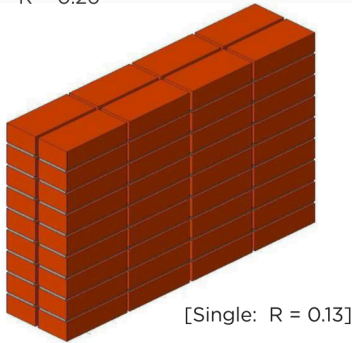
- R-value = The ability of a product to resist the transfer of heat.
- The higher the R-value the more effective the insulation
- R-value = Thickness of the Insulation / Thermal conductivity (k)



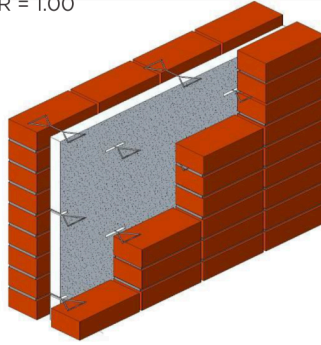
According to National Building Regulations 10400 XA efficiency Act, implemented 11 Nov 2011 the minimum requirement R-Value for construction walls is 0.35

Traditional Wall vs the New Systems

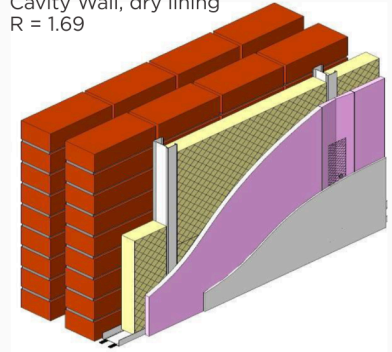
Traditional Wall
R = 0.26



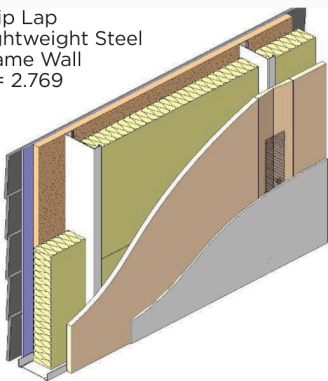
Cavity Wall insulation
R = 1.00



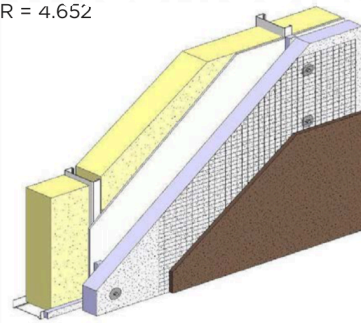
Cavity Wall, dry lining
R = 1.69



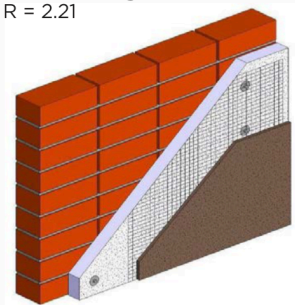
Ship Lap
Lightweight Steel
Frame Wall
R = 2.769



ETICS on steel frame
R = 4.652



ETICS on single brick wall;
R = 2.21



www.lcsh.co.za

Benefits of LFS Walls vs. Brick Walls

- Light Frame Steel (LFS) walls offer several advantages over traditional brick-and-mortar construction, making them a superior choice in modern building practices:
- **Faster Construction:** LFS walls are prefabricated and assembled quickly, significantly reducing construction time compared to the lengthy process of laying bricks and mortar.
- **Lightweight:** LFS is much lighter than brick, reducing the structural load on foundations and enabling easier transportation and installation.

Benefits of LFS Walls vs. Brick Walls

- **Cost-Effective:** The streamlined construction process and reduced labor requirements make LFS more economical in many cases.
- **High Strength-to-Weight Ratio:** Despite being lightweight, LFS offers excellent structural integrity and is highly durable, withstanding extreme weather and seismic activity better than bricks.
- **Precision and Design Flexibility:** Factory-made LFS walls allow for exact dimensions and seamless integration with modern designs, unlike bricks, which may vary in size and require manual adjustments.
- **Sustainability:** Steel is recyclable and generates less on-site waste compared to brick construction, making it a more environmentally friendly option.
- **LFS walls outshine brick walls in speed, efficiency, flexibility, and sustainability, making them ideal for modern, cost-effective, and eco-conscious construction projects.**