

UNIT I - PRINCIPLES OF CONSTRUCTION

Topic - 2: Load Bearing Structure, Framed Structure - Load transfer mechanism

Load Bearing Structure	Framed Structure
<p>Vertical Load Transfer:</p> <ul style="list-style-type: none"> • Roof/Floor Load: The load from the roof and floors is directly transferred to the walls. • Wall Load: The load-bearing walls carry the combined load of the roof, floors, and their own weight. • Foundation: The walls transfer the load directly to the foundation, which distributes it to the ground. 	<p>Vertical Load Transfer:</p> <ul style="list-style-type: none"> • Roof/Floor Load: The load from the roof and floors is first transferred to beams. • Beams: The beams carry the load horizontally and transfer it to the columns. • Columns: The columns transfer the load vertically to the foundation. • Foundation: The foundation then spreads the load to the ground.
<p>Lateral Load Transfer:</p> <ul style="list-style-type: none"> • Wind and Earthquake Loads: The walls resist lateral forces such as wind and seismic loads, but the structure's ability to withstand these forces is generally lower compared to framed structures. 	<p>Lateral Load Transfer:</p> <ul style="list-style-type: none"> • Wind and Earthquake Loads: The frame (beams and columns) resists lateral forces, providing greater stability against wind and seismic loads. The load is transferred through the frame to the foundation.

