An Introduction to the Nonlinear Static (Pushover)

Analysis Procedures

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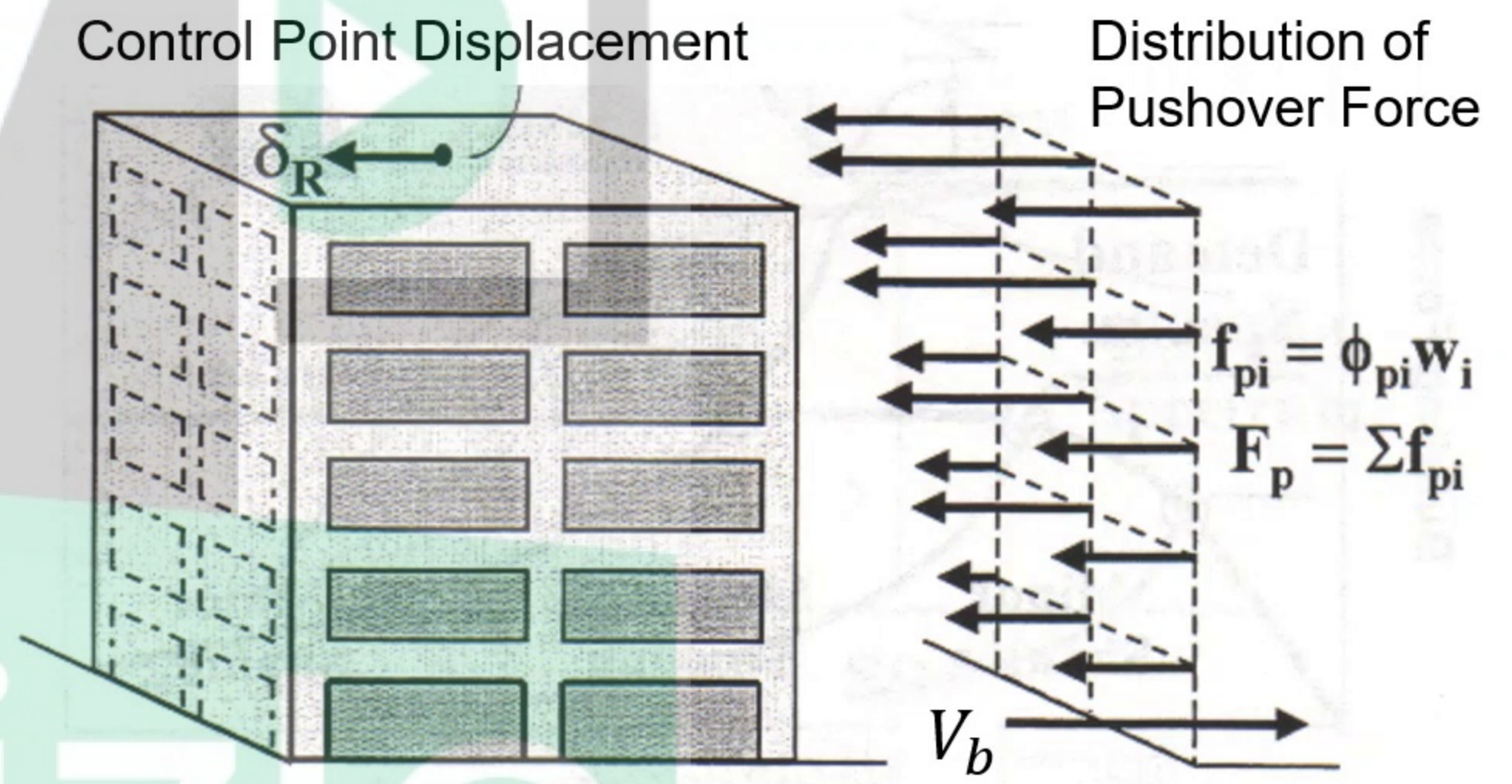- No Customer support

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Lateral Loads Pattern in Pushover Analysis

- Start with Gravity Loads

  - Dead Load

  - Some Portion of Live Load

- Select Lateral Load Patterns

  - Uniform (rectangular)

  - Code-specified static lateral load distribution

  - Inverted triangle

  - First mode shape (assuming that the building will primarily deform in first mode shape only)

  - Combination of mode shapes

  What load pattern to apply?

Control Point Displacement

Distribution of Pushover Force

δ_R

$f_{pi} = \phi_{pi} w_i$

$F_p = \Sigma f_{pi}$

V_b

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