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**ABBREVIATIONS**

RC  Reinforced Concrete.
SFRC  Steel Fiber Reinforced Concrete.
HSC  High Strength Concrete.
HSSFRC  High Strength Steel Fiber Reinforced Concrete.
FEM  Finite Element Method.
SIP  Shear Influencing Parameter.

**NOTATIONS**

\( V_{cx} \) - Shear carried by uncracked concrete.
\( V_i \) - Shear resistance due to aggregate interlock.
\( V_d \) - Shear resistance due to dowel action.
\( V_s \) - Shear carried by stirrups.
\( f'_c \) - Compressive strength of concrete at 28 days in MPa.
\( M_uV_u \) – Factored moment and Factored shear force at Cross section.
\( b_wd \) - Width and depth of Effective cross section in mm.
\( a/d \) – Shear span to Depth ratio.
\( \rho \) – Longitudinal Reinforcement Ratio.
\( p_t \) - Percentage of Tensile Reinforcement.
\( A_v \) - Area of the transverse reinforcement,
\( f_y \) - Yielding stress of steel
\( b_w \) - The web width.
\( A_{svw} \) – Area of shear reinforcement.
\( s \) – Spacing of shear reinforcement.
\( f_{ywd} \)  - The yield strength of the shear reinforcement,
\( V_{us} \) - Strength of shear reinforcement.
\( A_{sv} \) - Total Cross- section area of stirrups.
\( S_v \) - Spacing of the stirrups.
\( \alpha \) – Angle between the inclined stirrups and the axis of the member not less than 45°
\( \sigma_c \) - The compressive strength at \( i^{th} \) point.
\( \varepsilon_{cu} \) - The strain at the ultimate compressive strength \( f'_c \).
\( \varepsilon_c \) - The strain at \( \sigma_c \) compressive strength.
\( E_c \) - Elasticity modulus of concrete.
\( f_t \) - tensile strength of concrete.
\( V_f \) - Volume fraction of Fibers.
\( V_c \) - Shear capacity (N)
\( \tau \) – Shear stress (MPa).
\( d \) – Effective depth (mm).
\( \theta \) – Crack angle.