

CBR & Subgrade

Civil Engineering

What CBR measures, and standard axles.

CBR compares a soil's resistance to a standard plunger against that of crushed stone, as a percentage.

SOFT CLAY SUBGRADE
CBR 1 to 3%

WELL GRADED GRANULAR
CBR above 15%

- An index for design, not a strength parameter
- Tested soaked where the ground can wet up
- Low CBR means a thicker pavement above
- Capping raises a weak formation to workable
- Traffic is counted in standard axle loads
- Damage rises roughly with the fourth power

LOOK FOR IT

A car and a loaded lorry share the road, but the lorry does nearly all the damage.

Educational reference. Design CBR and traffic loading are set by the governing pavement design standard.