

Bearings

Civil Engineering

Forward and back bearings, and which north.

A bearing is a direction measured clockwise from north, and a back bearing differs from it by 180°.

Back bearing = forward bearing $\pm$ 180°

Bearing 040°

Add 180°.

Back bearing 220°

Bearing 250°

Subtract 180°.

Back bearing 070°

Next leg forward

Reduce below 360°.

Back bearing + angle

THE COMMON MISTAKE

✗ **Mixing grid, true and magnetic north**

✓ **State which north you mean**

Grid, true and magnetic north all differ, and magnetic north drifts year on year. A bearing quoted without its reference is not a direction.

Educational reference. Grid convergence and magnetic declination are published values that change with place and date.