

Metal Web Joists

Glossary of terms



Bearing

The part of a metal web joist receiving structural support. This is usually a wall but can be a beam or post etc.

Building designer

The person responsible for the structural stability and integrity of the building as a whole.

Cassette

Factory controlled, pre-assembled floor unit that helps reduce labour and construction time on-site.

Chord

The top or bottom structural timber element of a metal web joist.

Chord splice

A structural joint in the top or bottom chord formed using a connector plate.

Clear span

Distance between bearing points at each end of the metal web joist.

Connector plate

Metal plate having integral teeth punched from the plate material. It is used for joining timber in one plane with no overlap. It will have an accreditation certificate and will be manufactured usually, from galvanised steel.

Dead load

The load produced by the fabric of the building, always long-term (see design loads).

Deflection

The deformation caused by the loads.

Imposed load

The load produced by occupancy and use including storage, inhabitants, moveable partitions. Can be long, medium or short term.

Intermediate support

Additional bearing point within the length of the metal web joist.

Live load

Term sometimes used for imposed loads.

Metal web joist

Parallel chord trusses made from strength-graded timber, joined with engineered steel webs.

Metal webs

V-shaped metal plates having integral teeth punched to a patent design from the plate material. They are applied to both sides of a metal web joist to separate and support the top and bottom chords. Each web will have an accreditation certificate and will be manufactured, usually, from galvanised steel.

Nogging

Timber pieces fitted at right angles between the metal web joists to form fixing points.

Overall span

Total length of the metal web joist.

Restraint strap

Metal component designed to tie joist and walls for restraint purposes.

Strongback

A strongback is used to dampen vibration by increasing the stiffness of the floor and reduce deflection by load sharing.

Timber stress grading

The classification of timber into different structural qualities based on strength.

Trimmer

Additional metal web joists or pieces of timber used to frame around openings.