# Suspending *heavy* lighting

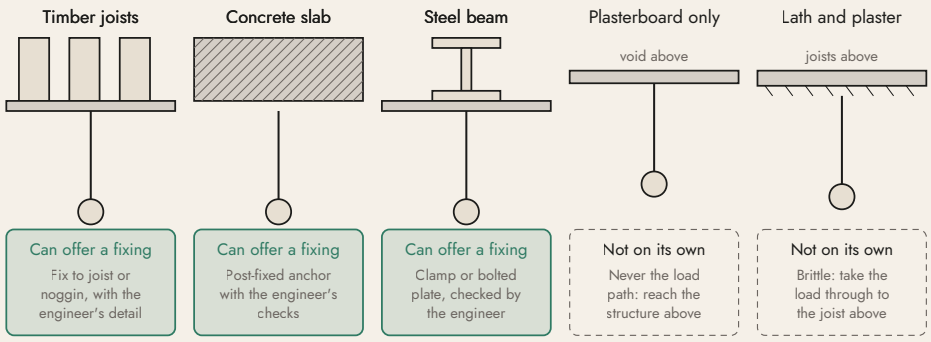
A heavy fitting must be carried by the structure, never by the plasterboard, plaster or ceiling rose. Principles, questions and a sign-off record only: no safe working load, factor, anchor or chain size.

Compliance guidance. This is principle-level guidance. It gives no safe working load, safety factor, fixing capacity or component size for any fixing type: those come from the partner workshop's declared ratings and a structural engineer's design for your ceiling. This is guidance, not engineering or electrical advice. Never hang a heavy fitting without a structural engineer's approval of the fixing.

## AT A GLANCE

| Ceiling type | What it can offer | Who decides | Ask |
|---|---|---|---|
| Timber joists | Can offer a fixing into the joist or a purpose-made support between joists | Structural engineer | Is the fixing into a joist or a designed support, and is the joist sound and big enough? |
| Concrete slab | Can offer a post-fixed anchor; the type depends on the concrete and the load | Structural engineer; installer | Which anchor, installed by whom, and has the engineer checked the slab and the anchor? |
| Steel beam or frame | Can offer a clamp or bolted plate; do not drill or weld without the engineer | Structural engineer; steel designer | Is a fixing designed for this beam, and are the fire protection and coatings respected? |
| Plasterboard only | A lining, not a load path for a heavy fitting | Structural engineer | Does the load pass through the board to the structure above? |
| Lath and plaster | Brittle and often old; a heavy fitting must be hung from the joists above | Structural engineer; heritage adviser | Has the ceiling been opened up, and what is above it? |
| Suspended or grid ceiling | Hangers carry the ceiling, not a chandelier; the fitting needs its own support to the structure | Structural engineer; ceiling designer | Does the fitting's support bypass the grid and reach the structure? |

A coordination list, not a rating. No loads, anchors or sizes are given: the structural engineer chooses the fixing.




Conceptual, not to scale. No loads are implied: the structural engineer confirms every fixing.

Five usual ceiling constructions and whether each can offer a structural fixing. Conceptual, not to scale; no loads are implied. Original drawing by Make Bespoke Studio.

## A SIGN-OFF RECORD IN SEVEN LINES

1 Declared weight and component ratings recorded. 2 Ceiling construction confirmed and structure identified. 3 Fixing designed and approved by the structural engineer. 4 Fixing installed to that design, inspected and photographed before

the ceiling is closed. 5 Secondary line, if any, separate; electrical connection slack. 6 Fitting hung to the method statement; any engineer-directed test recorded. 7 Records filed in the O&M information.

## SPECIFICATION WORDING

### STRUCTURAL FIXING

Fitting [tag] is to be suspended from the building structure only, by a fixing designed and approved by [structural engineer] against the declared weight and the construction of [ceiling type] at [location]. No load is to be carried by plasterboard, plaster, a ceiling rose or a suspended ceiling grid unless the engineer has approved that arrangement in writing. [Approval ref.]

### SUSPENSION COMPONENTS

The supplier is to declare the rating of every part between the fitting and the structure, including chain, rod or cable, connectors, canopy hook or plate and any adjuster, and the basis of each rating [test / calculation / manufacturer's declaration]. No part without a declared rating is to be used, and no part is to be substituted without [designer] and the structural engineer's approval.

### SECONDARY SUSPENSION

[A secondary suspension is / No secondary suspension is] to be provided for fitting [tag], as determined by [structural engineer]. Where provided, it is to be independent of the primary suspension, fixed to a separate fixing, and shown on the shop drawing [ref].

### INSPECTION AND SIGN-OFF

Each fixing is to be inspected and photographed before the ceiling is closed. The fitting is not to be hung until [structural engineer's] approval and the supplier's declared weight and ratings are on file. Any test load is to be as directed by the engineer and recorded. Completed records are to be included in the O&M information.

## TERMS USED

**Primary suspension**
The chain, rod or cable that carries a suspended fitting in normal use.

**Secondary suspension**
A second, independent connection between a suspended fitting and the structure, intended to hold the fitting if the primary suspension fails.

**Canopy (ceiling plate)**
The cover at the ceiling end of a pendant or chandelier that hides the fixing and wiring; on a heavy fitting the structural fixing sits behind it.

**Proof load**
A test load applied to a fixing or suspension to show it can carry more than its working load. Whether one is used, and its value, is for the engineer to set.

## STANDARDS AND SOURCES

- BS 7671:2018+A4:2026 Requirements for electrical installations: status from search summaries (published 15 Apr 2026); text not read. Regulation 559.6.1.5 read in an IET summary of the 2008 edition.
- BS EN IEC 60598-1 Luminaires, general requirements and tests: paywalled; text not read; confirm the edition and the suspension clause.
- Building Regulations 2010, Schedule 1, A1 Loading: read 7 Nov 2026.
- Work at Height Regulations 2005, reg 6: read 7 Nov 2026.

Full guide: https://makebespoke.com/trade/technical/suspending-heavy-lighting. Make Bespoke Studio coordinates manufacture through its partner workshops. Figures are guidance only and your specification governs; some may be superseded, so contact the studio to verify.