Load Path

Notes on house structures, for architects

NO. 01 · NOVEMBER 2026

Five things that change your drawings

Every heading and source in this PDF is a link.



AI-generated illustration: a new steel beam over a knock-through, each end on a padstone.

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CHANGELOG

RULE CHANGES FOR HOUSE WORK, RELEASE-NOTE STYLE

ADDED	**BS EN 1990-1:2023+A1:2026** and its UK National Annex: the basis of design for new structures.	BSI, 13 Oct 2026
ADDED	**BS EN 1990-2:2026**: assessing existing structures. Replaces PD CEN/TS 17440:2020.	BSI, 13 Oct 2026
CHANGED	**Steel imports, from 1 July 2026:** tariff-free quotas 51% lower; a 50% tariff above the quota.	gov.uk, 3 Nov 2026
COMING	**Future Homes and Buildings Standards, 24 March 2027.** The current rules apply only where notice goes in before 24 March 2027 and work starts before 24 March 2028.	gov.uk, 24 Mar 2026
COMING	**NHBC Standards 2027:** homes whose foundations begin on or after 1 January 2027. New chapter 3.4.	nhbc.co.uk
DEPRECATED	**First-generation Eurocodes:** due to be withdrawn on 30 March 2028. Both generations run side by side until then.	BSI, 13 Oct 2026

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Cloud 1 marks the change most likely to alter a drawing this month.

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AI-generated illustration: a cavity wall going up. If the cavity widens, the ties and lintels change with it.

REGULATIONS

The Future Homes Standard now has fixed dates

The Future Homes and Buildings Standards come into force in England on 24 March 2027. Work stays under the current rules only if the building notice, initial notice or full plans application goes in before 24 March 2027 and the work starts before 24 March 2028.

ON YOUR DRAWINGS

For a new house, settle the wall build-up early. If the insulation gets thicker and the cavity wider, the wall ties, lintels and the way steel beams bear on the inner leaf change with it, so we need the build-up before we size anything.

Source: Building Circular 01/2026, gov.uk, 24 March 2026

STANDARDS

The second-generation Eurocodes are arriving

In October BSI set out three new standards. BS EN 1990-1:2023+A1:2026 and its UK National Annex set the basis of design for new structures. BS EN 1990-2:2026 is a new standard for assessing existing structures, and replaces PD CEN/TS 17440:2020. The first-generation Eurocodes are due to be withdrawn on 30 March 2028, and until then the two generations run side by side.

ON YOUR DRAWINGS

Nothing changes yet, though calculations may start to cite the new codes over the next 18 months. For alterations, BS EN 1990-2 gives a recognised way to assess an existing house as it stands, rather than as if it were new.

Source: BSI, 13 October 2026



AI-generated illustration: universal beams at a stockholder.

COSTS

Tariff-free steel imports cut by half

Since 1 July 2026 the UK has limited tariff-free steel imports, with quotas 51% lower than under the old safeguard. Steel imported above the quota pays a 50% tariff. Beams, angles and hollow sections are all in scope.

ON YOUR DRAWINGS

Do not carry a steel price from an old quote into a client's budget. Get a current price and lead time, and tell us early if the budget is tight: common section sizes are usually easier to get.

Source: UK's steel trade measure from 1 July 2026, gov.uk, updated 3 November 2026

SHORT ITEMS

In brief

- **NHBC Standards 2027** apply to homes under NHBC cover whose foundations begin on or after 1 January 2027, with a new chapter 3.4 on materials in aggressive coastal environments. nhbc.co.uk/standards
- **Worth sending to clients.** A free guide for homeowners, Introduction to structural engineering for domestic clients (25 June 2026), explains what an engineer does on a house project. One point saves arguments later: the dimensions in an engineer's calculations are not for ordering steel or lintels, and the contractor should measure before anything is made. Read the guide
- **Worth reading.** The Structural Engineer's series Large openings in domestic structures: Part 1, steel moment frames (3 August 2026), and Part 2, foundations (1 October 2026), for members and subscribers. Part 1 · Part 2

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AI-generated illustration: I-joists before the ceiling goes up. Not the house in the report.

LESSONS

I-joists in a house fire

CROSS-UK Report 1550 describes a fire in a two-storey semi-detached house with I-joists that had OSB webs. Part of the floor near the stair collapsed once the webs burned away, and no fire-stopping was found above an internal loadbearing wall. The panel's view is that such systems are "generally compliant" but "may be vulnerable to early loss of structural integrity", and that fire-stopping should be "capable of being verified during construction".

ON YOUR DRAWINGS

Where I-joists are specified, detail the ceiling linings and the fire-stopping in the floor voids, especially round the stair, and say when they are to be inspected before they are boarded over.

Source: CROSS-UK Report 1550, 10 June 2026, updated 20 July 2026

IN COURT

An extension built over the gas pipe

A Bradford building company built an extension over the gas service pipe and left the boiler flue ending inside the new room. The gas network found it immediately dangerous and cut the supply. On 7 August 2026 the company was fined £10,000 with £4,263 costs, and its director £1,000. The Health and Safety Executive's reminder: everyone in control of domestic building work must have "a suitable and sufficient construction phase plan".

ON YOUR DRAWINGS

Show flues, gas meters and service runs on the survey and the proposed plans, and say who moves them before the footprint is set out.

Source: Health and Safety Executive press release, 17 August 2026



Councils start using AI on householder applications

PlanAssist, a government AI tool, puts an application, the local policies and the site constraints in one place and gives the planning officer a first assessment; officers still decide. In testing it cut time on key tasks by 58%, and the government says that halves processing times for routine householder applications, from eight weeks to four. It is now being tried in 15 councils, none of them in Surrey, and the aim is every council in England by the end of 2027.

For your projects: if permission comes back in four weeks, the structural design can become the hold-up. Bring the engineer in at sketch stage.

Source: MHCLG press release, 30 October 2026

Also: CROSS-UK Report 1554: unchecked AI output was used to justify heavy plant on a roof. A beam size from an online tool is a guess until an engineer checks it. Report 1554

Worth attending: the webinar AI in structural engineering, 1 December, 12:00, online. Details

QUICK QUESTION

Has a client brought you something made with AI this year: a layout, a render or a beam size?

Yes, more than once — REPLY →

Once — REPLY →

Not yet — REPLY →

Click an answer: it opens an email to us with your answer filled in. Results in December's issue.

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BACK PAGE

Spot the fault

Three things in this picture would worry us on site. How many can you find? The answers are printed upside down at the foot of this sheet.



AI-generated illustration, made for this puzzle. Not a real site.

YOUR TURN

Found something we did not list? Reply to hello@housestructuralengineers.co.uk and tell us what you saw. We read every answer.

SKETCH STAGE?

If a house project could do with an early structural view, send it over. The sense-check is free.

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NEXT ISSUE, DECEMBER

Before the site shuts for Christmas: concrete poured in the last week, walls left standing over the break, snow on half-built roofs, open trenches, and locking up. Plus the results of this month's AI question.

Answers. 1. The left end of the beam has no padstone. It sits on loose broken bricks and slate packing; a beam end needs a proper bearing, usually a padstone sized by the engineer and bedded in mortar. **2.** The left prop leans. Adjustable props are made to stand vertical; one at an angle is not working as designed and can kick out. **3.** That prop also stands on a broken paving slab. A prop needs a firm, level base, like the timber board under the right-hand prop.

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