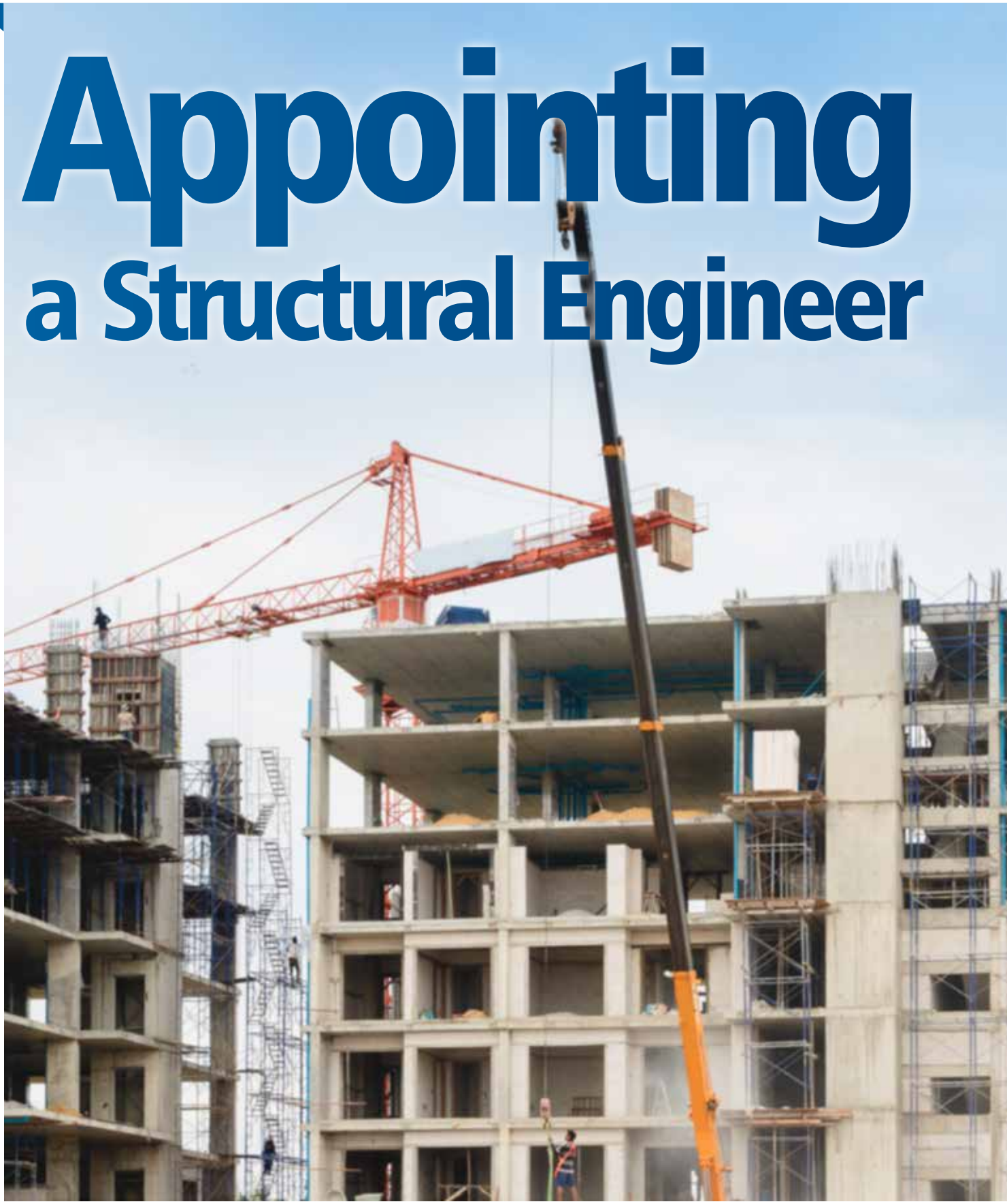
Appointing a Structural Engineer



Safety is the crucial aspect of any building project. Most of the construction work to the existing building or constructing a new building requires the specialist advice of the structural engineer. Inappropriate alternations to the building structure may lead to its collapse or defects and may invalidate a building's insurance.

A structural engineer is the designer of the structure of buildings, their alternations or extensions in accordance with regulation and legislation. A structural engineer will provide the professional assessment and advice or solution to building structural problems, for instance, cracking, defects, etc.

A structural engineer can work in collaboration with the designer. Construction works have to comply with Part A of Building Regulations and require detailed specifications and measurement. A completion certificate will be issued only if works and building comply with the law. It is recommended to check if the engineer has the appropriate level of PI insurance.

Structural engineers can advise on:

- deteriorating structural materials and building safety
- impacts of flood, fire or collapse, crack and movements
- alternation, removal or extension
- change of building use
- internal remodelling of the building

A structural engineer will provide the calculations and advice for foundations, drainage, ground improvement, demolition, steel, timber frame, fire protection, roof, structural detailing and others.

It is important to mention what laws are applied to building construction in the UK. Building Regulations (England, Wales or Northern Ireland) and Building Standards (Scotland). Planning permission is required for most alternations and building construction.

A structural engineer can assist in the application for building permission and inspect construction site for checks on work progress and its accordance with the drawings. Some buildings might require the Listed Building or Conservation Area Consent. Works on such buildings will need the specialist advice of structural engineers experienced in such field. Search www.careregister.org.uk or findanengineer.com for structural inspectors specialised in historical buildings.

A structural engineer will provide the inspection survey and report, advise on the design options and produce the required calculations, drawings and specifications. Moreover, the structural engineer will provide the builder with instructions and advice and will help to adhere to Building Regulations.

How much structural engineer costs?

Structural engineer costs can be 5-10% of the project's total cost. Ensure to include in the contract all necessary survey costs until the building completion.

The qualified engineers include Chartered and Incorporated Engineers who are members of the Institution of Civil Engineers and the Institution of Structural Engineers. Search for a Structural Engineer at istructe.org/building-confidence.

(Source: Institute of Structural Engineers (ISTRUCTE))

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LABC

Common Compliance Pitfalls

A guide for new builds and self builds

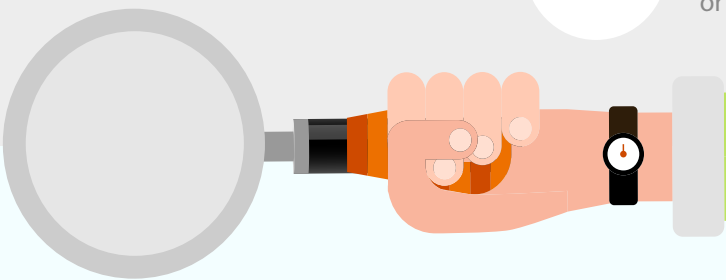
When it comes to obtaining **sign-off from building control** there are many common pitfalls that can lead to non-compliance. We've partnered with the LABC to bring you the key factors that can influence your construction completion certification on new builds and self-builds....

Extract from GreenWorks & LABC publication

Paperwork

Building Control cannot sign **off a new build or self build** dwelling unless specific paperwork has been supplied and verified, so to avoid timely **testing post sign-off ensure** you have the following:

- Air testing certificate
- Acoustic testing
- As-built SAP
- Gas safety certificate
- Electrical installation certification
- HETAS certificate
- Test certificates to support innovative/unusual products or European products ✓



On-site inspection

The fundamental on-site influences preventing building control from verifying compliance are:

A. Deviation from the approved layout plan

B. Deviation between the as-designed and as-built SAP

C. Lack of safety glass in critical locations

D. Damp proof courses are not high enough from ground level

E. Extract fans missing or not ducted to the outside of the property from bathroom or toilet areas

F. Fire alarms are missing or not connected

G. Continuity on insulation, typically where the roof meets the wall

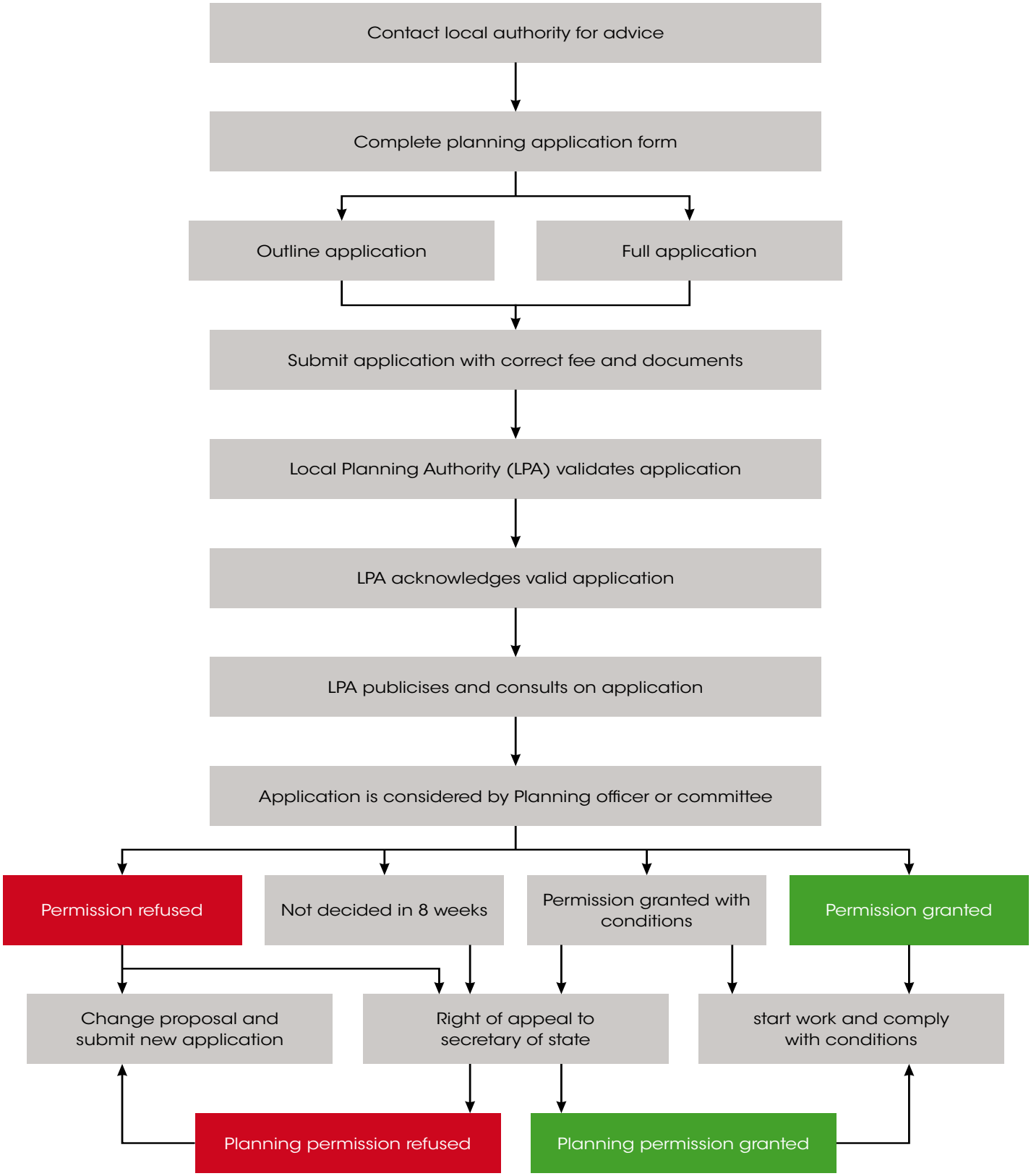
H. Product substitution

I. Abutment, usually a lack of flashing where the roof joins a wall

For more information visit greenworks.co.uk

THE PLANNING PROCESS FLOWCHART

A guide to navigating the planning process



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