



Common Compliance Pitfalls

A Guide for New Builds and Self-builds



**We've partnered up
with the LABC to provide
you with support that
will put you on course
for ensuring your
construction achieves a
completion certificate.**

On average, between 11,000-15,000 self-build dwellings are built each year and during January to March 2016 it is estimated that there were 32,950 house building completions.

The Critical Barrier

Building compliance is a critical barrier that can stand in the way of any house construction reaching completion status. However, compliance can also be the element that isn't focussed on extensively, resulting in sign-off failures.

We understand that the vast amount of standards and regulations can make compliance seem daunting, which is why we've partnered up with the LABC to provide you with support that will put you on course for ensuring your construction achieves a completion certificate.





Fundamental Factors

There are two fundamental factors that typically impact building sign-off - The paperwork and the on-site inspection. Through this guide we go through each one in detail to ensure you have everything you need for your building control visit.

The Paperwork

Every new-build or self-build dwelling requires a series of certificates to display that the construction complies with Building Regulations. A building control officer must verify that each certificate has been presented within the building paperwork before they can sign-off any new-build or self-build dwelling.

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The Certificate Checklist

1 Air testing certificate

This documentation displays that the dwelling's air permeability rating meets the target stipulated in the Standard Assessment Procedure (SAP).

2 Acoustic certification

This is only a requirement for new-build dwellings, flats, rooms for residential purposes i.e. hotels and houses that have undergone material change of use. It does not apply to detached dwellings. An acoustic certification displays that the property has adequate sound insulation allowing it to reduce the passage of noise between separating walls and floors.

- New build dwellings with separating walls must achieve a minimum airborne sound resistance of 45dB
- New build dwellings with separating floors must achieve a minimum airborne sound resistance of 45dB AND allow a maximum impact noise level of 62dB under test.
- Material change of use dwellings with separating walls must achieve a minimum airborne sound resistance of 43dB.
- Material change of use dwellings with separating floors must achieve a minimum airborne sound resistance of 43dB AND allow a maximum impact noise level of 64dB under test.

3 As-built SAP calculation

A SAP calculation displays that both the Dwelling Fabric Energy Efficiency (DFEE) and the Dwelling Energy Rating (DER) meet the Building Regulation targets.

4 Electrical installation certificate

This certificate displays that all the electrical work undergone within the dwelling conforms with BS7671.

5 Test certificates for any innovative/unusual products or any European products

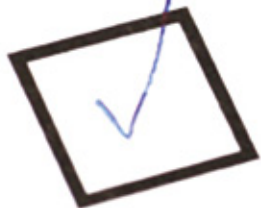
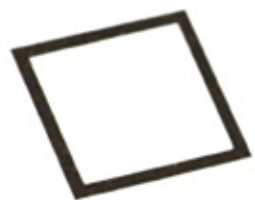
These certificates will display that the products follow British Standards or have European Technical Approval.

6 Gas safety certificate

This indicates to building control that a gas safe engineer has installed the heat producing gas appliance in the dwelling.

7 HETAS certificate

This certificate is only relevant if a biomass or solid fuel heating appliance has been installed within the property. It displays that the appliance has been Government approved and installed to comply with the sustainability requirements within the Building Regulations.





The On-site Inspection

When it comes to an on-site inspection there are a number of factors that can cause your dwelling to fail. We've listed the most common site issues and provided solutions to prevent you from encountering these problems.

1 Deviation from the approved layout plan

Solution?

It is always best practice to stick to your layout plan. But if a situation arises which means you have to alter an aspect of the building layout, always ensure you liaise with building control before undertaking any work as you may have to contact your local planning authority.

2 Thermal bridges in the continuity of insulation, usually where the roof meets the wall

Solution?

Registered Construction Details have been specifically created to display how to achieve continuity of insulation through various junctions in the dwelling. The LABC and Build Aviator have created 368 RCDs with an integrated product library to simplify material selection for compliance.

3 Deviations between the as-designed and as-built SAP

Solution?

Ordering products once your as-designed SAP has been completed, will prevent the contractor from switching to another fabric solution when the construction has commenced, should they discover their chosen merchants don't have the supplies needed in stock.

4 Product substitutions

Solution?

Stick to your original product list. Even if you alter a product to a solution with a higher energy efficiency it could cause a failed SAP assessment, as altering one product can impact the performance requirement of others. For example, installing less insulation can affect the level of air tightness required to offset this change.

5 Lack of weathering at roof abutments

Solution?

Typically, flashing is used to weatherproof an abutment detail, however a secret gutter or traditional soaker could also be used, dependant upon the tile type on the roof.

6 Lack of safety glass within glazing in critical locations

Solution?

Critical locations are either between the finished floor level and 800mm above, in internal or external walls and partitions, or between the finished floor level and 1500mm above that for a door or side panel close to any edges of the door. Safety glazing in the dwelling should either break safely, be robust, in small panes, or be permanently protected.

7 Damp proof courses not high enough from ground level

Solution?

On an external wall the damp proof course should be at least 150mm above ground level and should be continuous with the floor damp-proof membrane. External Cavity walls should also have at least 225mm clear wall cavity depth, or have a damp-proof tray and should have weep holes every 900mm.

8 Extract fans missing, not to capacity or not ducted properly

Solution?

Extract fans should be present in the kitchen, bathroom and toilet areas of every dwelling and should be ducted to remove the air directly from the space the fan is installed to the outside of the property.

The ventilation system installed in the property should be capable of limiting moisture build up and pollutants generated from within a building which could be harmful to the health of those inside it.

9 Fire alarms are missing or not interconnected

Solution?

All new build dwellings should be constructed with a fire detection and fire alarm system in accordance with BS 5839-6:2013 to at least a grade D category LD3 Standard.

Which means the system interlinks one or more smoke alarms, each with its own stand alone power supply and should also incorporate detectors in all circulation spaces that form part of an escape route from the property. Additionally, heat and smoke alarms should be mains operated to conform with BS EN 14604.

Sources

- THE BUILDING REGULATIONS APPROVED DOCUMENT B
- THE BUILDING REGULATIONS APPROVED DOCUMENT F
- THE BUILDING REGULATIONS APPROVED DOCUMENT C
- THE BUILDING REGULATIONS APPROVED DOCUMENT E
- **FIRE ALARM INFO**
<http://www.safelincs.co.uk/pages/bs5839-6.html>
- **HOUSE COMPLETION STATS**
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/525629/House_Building_Release_Mar_Qtr_2016.pdf
- **HETAS GUIDE**
<http://www.hetas.co.uk/professionals/hetas-guide>
- **CHOOSING CORRECT WEATHERING DETAIL AT SIDE ABUTMENTS**
<http://rcimag.co.uk/sandtoft-blog/choosing-the-correct-weathering-detail-at-side-abutments>

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