

PROGRESSION GUIDANCE FOR SPECIFIERS



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Project applications for the PROGRESSION window and door system

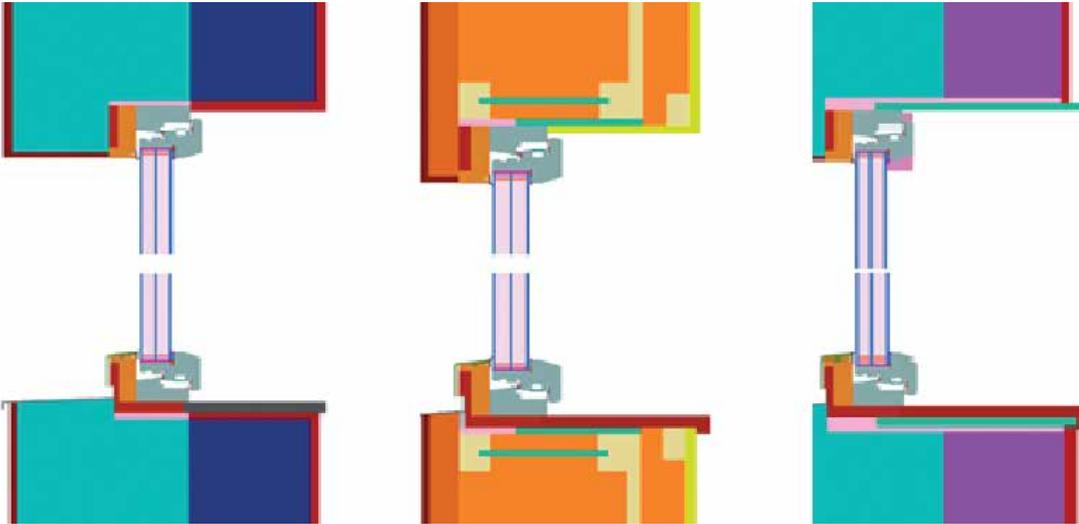
The PROGRESSION window system is a specialist product perfectly suited for use on Passivhaus, EnerPHit or exemplar low energy projects.

These notes are for the guidance of specifiers who are considering specifying the PROGRESSION system of windows and doors. The following notes are intended to help with assessing whether this is the correct window system for your project.

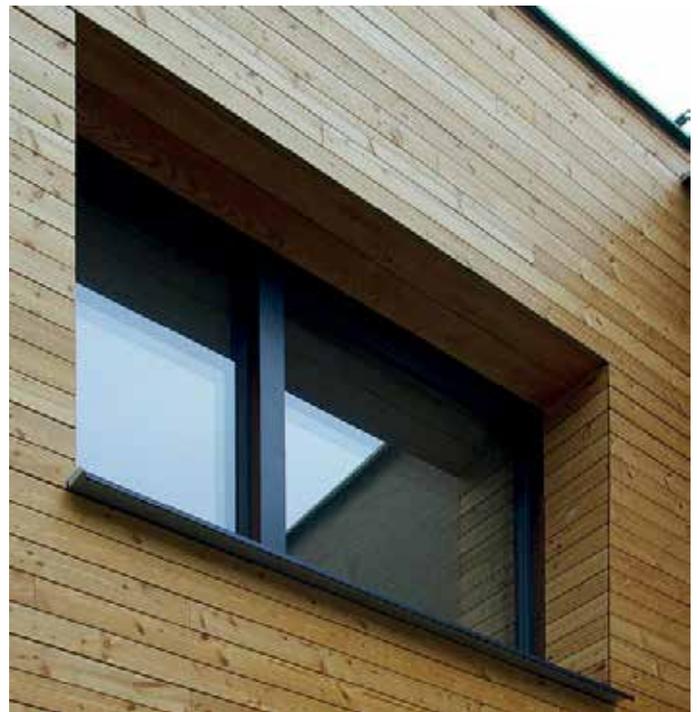
Please read through these notes carefully before considering PROGRESSION further. Of course if you have any questions, or wish to discuss this information please do contact us.

The PROGRESSION system has been certified by the Passivhaus Institute and achieves a certified component level of pH_A . It therefore is not recommended to use this system when the fabric performance of the construction is not achieving insulation levels of $< 0.15 \text{ W/m}^2\text{K}$.

The design of the PROGRESSION profile makes the system ideal for installation within the fabric insulation of the structure. The PROGRESSION system is not appropriate for use with standard installation details; to achieve the best Psi installation values possible, the window detailing should be designed around the PROGRESSION profile. **The PROGRESSION profile should not be used with generic detailing designed for use with other windows and doors.**



The minimalist design and simple form of the Progression system should be considered when designing the fenestration for a project. One of the stunning features of the Progression system is the hidden frame and reduced sight lines. Adding unnecessary mullions and transoms to a design will detract from this aesthetic, and we would therefore strongly advise that these are kept to a minimum where ever possible.





The Thermowood used for externally cladding the PROGRESSION System is supplied in a stained finish of either Brown or Grey. To help meet the requirements for your project, the GRP cill covers can be supplied in any standard RAL colour finish.

The internal frame of the PROGRESSION system is manufactured from Spruce with a clear finish as standard, although upon request there is a variety of RAL Colour finishes available.

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PROGRESSION external view



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PROGRESSION internal view



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Hinge clearance

Because of the very narrow fixed frames of the PROGRESSION window it is very important that internal linings are carefully designed. To allow for hinge clearance we strongly recommend aligning internal reveal linings with the outside edge of the frame, as diagram. Packers can be supplied and fixed in the factory, or as a site operation. Typically they might be 15 or 18 mm.

For further information please discuss with us.

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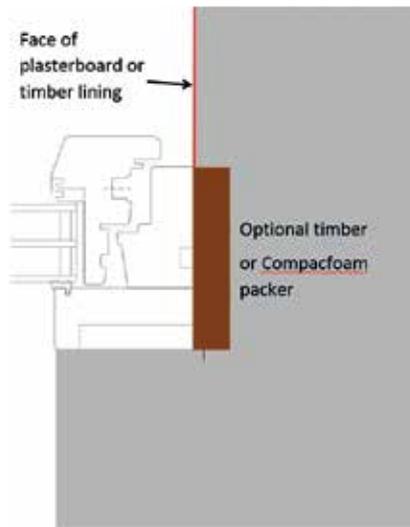
Extension sills

Deep extension sills are usually required with PROGRESSION windows due to wall depth and normal Passivhaus detailing. Extension sills are only available in aluminium in a choice of standard RAL finishes. It is usual to select either RAL 7016 or 8011 to match Thermowood cladding and GRP sills. See page P.3 for pictures.

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Part M (mobility) compliance

PROGRESSION doors include a wheelchair accessible sill, but it is important to note that this is not strictly Part M compliant. It is important therefore to obtain approval from your Building Control Officer at an early stage. Alternatively specify our **Ultra** doors which are Part M compliant.



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Part Q compliance

Approved Document Q ('Part Q') of the Building Regulations for England* came into force on 1 October 2015. This is a new part of the Building Regulations covering security.

Windows and doors in new build applications, where Part Q is applicable, now need to be tested and carry certification to PAS 24. Alternatively, testing to the European security standard, EN1627 can be compliant with PAS24 with certain conditions, and therefore can give Part Q compliance.

Part Q applies only to new dwellings. The requirement applies only to easily accessible doors and windows which give access to the dwelling or a flat within the dwelling.

At present PROGRESSION products have been tested and certified as follows:

- Windows with security specification, EN 1627 RC2N, PAS 24 compliant.
- Glazed single doors, EN 1627 RC3 plus additional UK testing, PAS 24 compliant.

All Part Q compliant options are variants of the standard PROGRESSION product, at a price premium.

There are no plans to test other PROGRESSION products at present. So, where Part Q compliance is required, PROGRESSION windows can be mixed with our Ultra range single doorsets, double doorsets and sliding doorsets which are SBD/Part Q compliant.

Our estimating staff will try to assess where Part Q compliance may be required on your project, and quote accordingly. However, it can be difficult to judge in all circumstances so we can take no responsibility for errors or omissions in this respect. If possible, we would strongly encourage you to review this aspect of your project prior to requesting a quotation, so that it can as accurately as possible reflect your requirements.

Please note that the following size limits apply to Part Q compliant options:

TYPE	WIDTH mm	HEIGHT mm
Opening window (including frame)	600 – 1320	825 – 1815
Glazed door (including frame)	800 – 1200	1900 – 2400
Fixed window	See important note below	

VERY IMPORTANT Note on fixed windows

BS EN 1627:2011 is not an EU harmonised standard. The UK standard PAS24 takes precedence in the UK. BS EN 1627:2011 tests can meet the requirements of PAS24 as outlined in the standard. Progression products above have been tested to BS EN 1627:2011 to the standards required to be compliant with PAS24. BS EN 1627:2011 gives minimum and maximum sizes for compliance for fixed lights as well as opening lights. However, the normal understanding in the UK is that because the test indicates the security of retention of glazing this is independent of size. This is the approach taken by independent certification to comply with SBD requirements. Our understanding therefore is that the reasonable scope for fixed lights should be to any size, not to the scope as given in BS EN 1627. If in any doubt, we advise consulting your local Building Control Officer, or other person offering building compliance verification prior to ordering Progression. We will not accept any liability for fixed lights being deemed to be out of scope for Part Q compliance.

Should you need to comply with Part Q, and have questions or concerns, please discuss this with our staff as early as possible in the quotation process.

Note: these notes are given for guidance only. For full information on Part Q, please refer to the relevant standard or consult your construction professional.

*Also applicable to ‘excepted energy buildings’ in Wales. Scotland has separate regulations.

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Summary

As a specialist window, the main design intention is to achieve the highest standard of performance. Consequently, PROGRESSION does not offer options that will compromise this at present. The main points to consider have been noted below:

- PROGRESSION Window system is Green Building Store’s premium window range and has a price for windows which can be in the region of £600 / m²
- Part Q compliance is available as an option for windows (fixed and opening) and fully glazed entrance doors.
- Bi-fold doors are not available in the PROGRESSION range.
- Lift and slide doors are available with Passivhaus Institut certification. However please note that these do not have Part Q compliance and are therefore generally not suitable for use in new build projects in England. Lift and slide doors, Part Q compliant are available in our Ultra range. Please be aware that the lift and slide units have restrictions on the scheme options available.
- Although entrance doors are provided with mobility access thresholds, these are not Part M compliant.
- Secured by design is not an available option for the PROGRESSION range.
- PROGRESSION doors have not yet been certified by the Passivhaus institute although appropriate evidence can be provided confirming the actual U values.
- The PROGRESSION system is not suitable for application as curtain walling.
- The PROGRESSION system of windows and doors is only supplied as inward opening units we do not supply outward opening units in this range.
- Extension sills will always be in aluminium.

We hope that the information above has been informative and, and if you have found that the PROGRESSION window range does not meet the requirements for your current project, then please get in contact as we would be happy to help advise you on the other window and door systems we provide at Green Building Store which may be more suitable.