

What information is required for a structural engineers report?

The Building (Scotland) Act 2003 introduced the option of certifying design or the construction of building work as complying with the Building (Scotland) Regulations 2004.

The certification system is based on the principle that suitably qualified and experienced building professionals and tradesmen can be responsible for ensuring that specified works comply with building regulations. However, the building professionals and tradesmen must be approved to carry out certified tasks. They are required to demonstrate that they have the relevant qualifications and experience for the role and must be employed by a reputable company which operates a system of careful checking. The use of an Approved Certifier removes the need for the detailed scrutiny of designs or inspections by verifiers.

The certification system is run by the Scottish Government Building Standards Division (BSD)

Certification is an optional procedure for the implementation of building regulations in Scotland and is only relevant to works subject to the building warrant process. Certification is the statement by an Approved Certifier that specified aspects of a design proposal, or of a completed construction, comply with the Building (Scotland) Regulations 2004.

Certification is usually delivered through schemes approved by Scottish Ministers by scheme providers

An applicant for a building warrant or an amendment to a warrant may choose to include certificates issued by Approved Certifiers of Design as part of the application process. On completion of the project, the relevant person (usually the building owner or developer) has the option to include certificates by Approved Certifiers of Construction as part of the completion certificate submission. As these certificates provide the verifier with confirmation of compliance with current building regulations, the number of checks to be undertaken by the verifier is greatly reduced. The benefits to applicants using certification services include: a reduction in the length of time required to process a building warrant or completion certificate



How does this affect windows and doors?

The level of details required by the Approved Certifier will depend on the risk category the building is deemed to be in. In some cases, very little information will be required but for many a design load and proof of performance will be required. As all VEKA UK Group products are tested to the BS6375 series of standards an exposure category based on table 1 within the standard can be calculated, this is through the results of the various tests undertaken which in combination create the category level. The exposure category is relevant to the level of exposure the product can withstand

Calculations available to support the application

To satisfy the requirements of the structural engineers report VEKA UK Group will supply the Approved Certifier with a design load calculated using the building location and height. Once calculated we can match the exposure category of the products to the design load, to confirm adequate performance the exposure category should always be greater than the design load. The design load will affect the deflection of various elements of the product which may need reinforcing to perform at the correct levels and to avoid deflection greater than 1/150. Our calculations will specify the correct VEKA reinforcing to be used and where coupling of windows should be used as the specified sizes are outside the maximum sizes tested. Specifications are checked against our Kitemark to confirm all weather and deflection related performance characteristics.

Window and Door Sizes 1:40
 Dimensions should be checked on site prior to manufacture of windows.
 Veka profiles to be used throughout, or equal approved.

Window Schedule				
Window Type	Opening Size, H x W (mm)	Window Size, H x W (mm)	Service Zone to Head, H (mm)	Tilt and Turn Window, H x W (mm)
W1	1910 x 2450	1720 x 2440	160	1635 x 760 (Inward)
W2 (Door)	2880 x 950	2150 x 965 (Door), 545 x 965	160	-
W3	1980 x 1095	1790 x 1085	160	1705 x 670 (Inward)
W4	2030 x 2165	1810 x 2155	160	1715 x 670 (Inward)
W5	960 x 2165	925 x 2155	-	840 x 670 (Outward)
W6	2010 x 1480	1820 x 1470	160	-
W7	2010 x 1485	1820 x 1475	160	1735 x 780 (Inward)
W8 (Door)	2915 x 920	2150 x 965 (Door), 580 x 965	160	-
W9	1970 x 2480	1780 x 2470	160	1690 x 775 (Inward)
W10	950 x 1570	915 x 1560	-	830 x 775 (Outward)

Flat 1 Entrance 1:20
 Must Be 800mm Min.
 Recessed Door Frame into Stone

- Use 66mm or 86mm mullion with 113321, 0.9mm thick
- Use 86mm mullion with 113378, 1.2mm thick
- Use beam aluminium coupler 104474 with 709126 covers
- * Sashes over maximum size - see Kitemark

When using genuine VEKA UK Group components, including reinforcing, the design load package and a copy of Kitemark KM33520 can be sent to the specifier, this will be passed on to the Approved Certifier who will use the information as proof of performance for the product installed as part of an overall package of information for the Verifier when applying for a building warrant or a completion certificate.

VEKA UK Group calculations are based on the confirmed characteristics of genuine components and are therefore inaccurate when genuine VEKA UK Group components are not used. In such cases it is the responsibility of the fabricator to confirm the product will meet the requirements of the design load and to supply evidence to support such claims to the Approved Certifier.