

SASFA ACCREDITATION SCHEME FOR LIGHT STEEL FRAME BUILDING SYSTEMS



1. OBJECTIVES

The objective of this Accreditation Scheme is to provide prospective users of steel frames or steel framed buildings an opportunity to identify companies and light steel frame systems that have been assessed for quality and were found, at the time of the audit of the company and its products, to meet the standards set by the steel frame building industry.

The Scheme is also intended to provide manufacturers and erectors of light steel frame building systems, as well as the builders of buildings which incorporate light steel frames, a facility for the technical assessment of their systems, procedures and work against the requirements of the code of practice governing such buildings, the National Building Regulations, and what is accepted in the industry as constituting good practice.

2. DEFINITIONS

In this document the following definitions shall apply:

- a) A '**Person**' can be a company, partnership or individual
- b) A '**Manufacturer**' is a Person which profiles and assembles the light steel building frames according to a registered system.
- c) An '**Erector**' is a Person responsible for erecting the steel frames and/or trusses on site.
- d) A '**Builder**' is a Person which carries responsibility for the completion of the shell of the building, including roof, ceilings, walls and floors, together with all the items such as doors and windows that form part of the shell.
- e) An '**Assessor**' is an individual appointed by SASFA to scrutinise whatever is submitted for accreditation and to report findings.

3. SCOPE AND SIGNIFICANCE OF ACCREDITATION

Accreditation can be granted on one or more of four levels or stages under this Scheme:

- a) Stage 1: The Building System comprising the concept and design of the steel frame, or of structural elements such as roof trusses,
- b) Stage 2: Production and assembly of the steel frame or structural elements.
- c) Stage 3: Erection of the steel frame (including trusses) on prepared foundations or supports.
- d) Stage 4: Completion of those aspects of the shell of the building that are peculiar to steel framed buildings, or that affect or are affected by the steel frame, particularly the roof and wall cladding, insulation, floors and ceilings.

A Person can apply for accreditation on any stage, provided that:

- a) For Stage 2 accreditation, the relevant steel frame or structural elements carry a valid Certificate for their concept and design,
- b) For Stage 3 accreditation, both the relevant steel frame or structural elements and the Person responsible for their production and assembly carry valid Certificates,
- c) For Stage 4 accreditation, the relevant steel frame or structural elements, the Person responsible for their production and assembly, and the Person responsible for the erection of the frame all carry valid Certificates

A Person may apply for only certain structural elements, such as trusses, to be accredited.

Accreditation is granted to an applicant by SASFA on the basis of the recommendations of the relevant Assessors after they have studied the information and evidence made available to them. It is the responsibility of the accredited Person to maintain a satisfactory level of quality. If after accreditation is granted to a person substantiated reports are received that indicate a decline in the Person's quality standards, a follow-up audit may be carried out, and the accreditation of the Person may be withdrawn, depending on the outcome of the audit.

Accreditation can be granted for one or more stages, and the numbering sequence does not indicate or imply that any particular stage or level is in some way superior to another.

Accreditation confirms that the system or business was found, after close inspection by appropriately experienced and qualified Assessors, to meet, at the time of the inspection, the technical requirements for ensuring that any building in which a steel frame or structural component is used will perform adequately in all respects, to the extent that its performance depends on the accredited system or Person, and that the Person's business has the necessary systems in place to provide the Assessors with a reasonable level of confidence that the quality and standards will be maintained.

SASFA may grant partial, temporary, or provisional accreditation.

Accreditation is evidenced by an Accreditation Certificate ('Certificate') issued in the form prescribed by SASFA.

The nature of any particular accreditation, as well as its scope and the limitations that apply to it will be stated on the accreditation certificate.

Accreditation of any Person does not imply any approval of the business practices or financial status of the accredited Person. However, members of SASFA, as signatories to the SASFA Code of Ethical Conduct, will be held to the Code provisions.

4. DURATION AND TERMINATION

The accreditation shall be valid for a maximum period of 3 years after which time the accredited Person has to apply for re-accreditation, or the validity of the accreditation will lapse.

SASFA retains the right, after due process, to suspend or withdraw accreditation and to cancel the certificate in the event that:

- (a) the accredited Person is placed in liquidation or commits an act of insolvency;
- (b) the accredited Person's membership of SASFA is terminated for any reason;
- (c) SASFA advises the accredited Person that complaints have been received and these are not attended to either at all or to the satisfaction of SASFA;
- (d) SASFA notifies the accredited Person that it is alleged to engage in business practices that tend to bring SASFA into disrepute and thereafter it does not receive a satisfactory response to the allegation;
- (e) The accredited Person does not adhere to the SASFA Code of Ethical Conduct despite demand made by SASFA for such compliance.
- (f) Re-accreditation is required as determined under 5. below, and it is found that the Person or system no longer meets the required standards for accreditation.

If accreditation is withdrawn or suspended the accreditation certificate shall be returned to SASFA.

5. RIGHTS AND RESPONSIBILITIES OF ACCREDITED PERSON

Any accredited Person may claim to be 'ACCREDITED BY SASFA' (or words to the same effect) with respect to itself or its products or the products of another Person used or incorporated in its buildings, provided that such claims may not be misleading or inaccurate.

The Accredited Person may display the Certificate and show or refer to it as desired.

During the 3 year period that a Certificate is valid an accredited Person shall notify SASFA of any proposed revisions to the system(s) or procedures or any change in key personnel and SASFA shall determine the effect on existing accreditations. Where revisions are significant enough (as determined by SASFA in its discretion), re-accreditation may be required, on a limited or comprehensive basis.

Any accredited Person must at all times ensure that the quality of design, materials and workmanship of their product does not during the period of validity of the Certificate slip below that which applied at the time of the audit, and act in accordance with the requirements of the SASFA Code of Ethical Conduct.

6. APPLICATION FOR ACCREDITATION

An applicant must make a formal application on the appropriate forms and must supply SASFA with all the information requested on the forms, as well as any additional information the applicant may deem relevant.

In submitting an application for accreditation, the applicant undertakes to:

- a) provide SASFA's Assessor(s) full access to all the information, documentation, personnel, equipment and spaces the assessors require to see or interview,
- b) do such demonstrations as the assessors may request,
- c) proceed with work as normal, or
- d) do whatever else (within reasonable limits) the Assessors may require to form an opinion of the system(s), the work or the business.

7. ASSESSMENT PROCEDURE

The assessment process is set out in Appendix B.

SASFA will acknowledge receipt of any application for accreditation, and will appoint the Assessors. The Assessors will study the documentation submitted with the application, and inform the applicant of any additional information that may be required, and the process will only continue once such information has been obtained.

If it is found on the basis of the information submitted that the system or Person cannot be accredited, the applicant will be informed accordingly, and a report detailing the shortcomings will be provided.

SASFA or its Assessors may inform the applicant as to which improvements or amendments need to be made before the accreditation process can continue.

After receipt of an application SASFA will instruct its Assessors to make a first assessment based on the application documents to determine if they are satisfied that an inspection is warranted, SASFA will make an appointment for the Assessors to visit the applicant to do their on-site assessment.

From that point onward the assessment process will proceed by mutual agreement between the applicant and the Assessors.

The Assessors may provide the applicant with guidance with respect to amendments or improvements that may facilitate accreditation.

The Assessors will prepare a report on their findings, which will be submitted to SASFA. SASFA may issue the Accreditation Certificate, or withhold it temporarily pending fulfillment of detailed requirements, or refuse the application. In the latter two cases SASFA will inform the applicant in writing of finalisation requirements or reasons for refusal of the application, as the case may be.

In the event of the applicant not being satisfied with the findings of the Assessors, an appeal may be lodged with the SASFA Steering Committee, who will decide on appropriate steps to address the disagreement.

Guidance to Assessors and prospective applicants relating specifically to the assessment of the concept and design of light steel frame systems is given in Appendix A.

The Assessors will have the right to consider any relevant information from any source in assessing an application.

8. INDEMNITY

All applicants for accreditation in terms of this Accreditation Scheme acknowledge that SASFA does not accept any liability howsoever it may arise:

- a) as a result of issuing the Certificate in conformity with the Accreditation Scheme, and
 - b) in conferring accreditation status on the member,
- and an accredited Person, by requesting the issue of a Certificate, indemnifies SASFA and holds it harmless against any claims of whatever nature, may be made against it with regard to the accreditation process, or the use the Person makes of the Certificate or its/his/her claims to accreditation. Any Certificate granted is issued strictly subject to this condition.

SASFA shall be fully indemnified by the accredited Person, who is the holder of the Certificate, against all costs, charges, expenses, loss or damages and liabilities howsoever incurred in relation such Person's use of or participation in the Accreditation Scheme insofar as the same is attributable (whether directly or indirectly) to any act or omission of the accredited Person or its servants, agents, employees or assigns. The indemnity shall form part of the application documents referred to in 5. above and must be acknowledged and accepted by the applicant by his signature on the relevant form.

The issuing of the accreditation certificate shall be dependent on the required indemnity being in place.

SASFA makes no warranties or representations about any accredited systems, procedures, accredited Persons or their suppliers save as set out in the Accreditation Certificate. The Person granted an Accreditation Certificate in terms hereof undertakes to inform and advise its customers and business interests that SASFA limits its warranties or representations as aforesaid.

9. CONFIDENTIALITY

SASFA and its Assessors undertake not to disclose any information they may acquire concerning any Person that has been assessed for accreditation, or about its systems, except for the following:

- a) The fact that the Person has applied for accreditation.
- b) Whether or not any assessment was done.
- c) Whether or not accreditation was granted, and the nature of it.

d) The contents of the accreditation certificate.

The reasons for not granting accreditation or granting only a limited form of accreditation may not be disclosed to anybody other than the contact person listed on the application form for accreditation and his/her superiors in the applicant's business.

SASFA is free to publish a list of accredited companies and/or systems, and the nature of such accreditation.

APPENDIX A – EVALUATION OF CONCEPT AND DESIGN OF LIGHT STEEL FRAME SYSTEMS

This appendix is intended to give guidance to Assessors responsible for assessing whether light steel frame systems or structural elements meet all the relevant requirements in terms of their concept and design.

1. REVIEW OF SYSTEM MANUAL

The system manual will be reviewed by an Assessor who is a professionally qualified and appropriately experienced engineer to ensure that:

- a) The claimed range of uses is covered by the manual;
- b) The structural design philosophy is valid and has been followed and any project specific requirements such as the need for supplementary calculations are clearly described;
- c) The instructions regarding the need for, and usage of, the various components in the system are clearly described;
- d) The applicability of different cladding systems and constraints on the use of the system are clearly described;
- e) Any special fixing requirements or additional components do not form part of the supplier's system are explained, e.g. timber wall plates, timber roof trusses, brick ties etc.
- f) The appropriate load factors and limiting serviceability criteria are clearly described;
- g) The limitations and scope of the system are clearly described.

SASFA will have the right to consider any relevant information from any source in determining an application.

2. TEST REGIME

Where the system relies on testing, the reports on the test procedures will be reviewed against the following criteria:

- a) The appropriateness and independence of those carrying out or supervising the test work;
- b) The conformity of the test conditions in representing the intended conditions of use;
- c) The completeness of the test programme to cover the relevant claimed range of use in terms of
 - i. Spans range
 - ii. Section range
 - iii. Support conditions
 - iv. Cladding and fixings
 - v. Load conditions
 - vi. Wall heights
 - vii. Bracing configurations
 - viii. Holding down mechanisms
- d) The accuracy of the measurement of
 - i. Loads
 - ii. Deflections
 - iii. Materials, including strength and section properties
- e) Calibration records of equipment

3. DERIVATION OF DESIGN DATA FROM TEST RESULTS

The treatment of the test results will be reviewed to ensure that:

- a) The results have not been extrapolated to extend the design data beyond the limits of the test programme.
- b) The design expression(s) derived take all significant factors into account.
- c) An appropriate statistical method has been used in deriving the design data from the test results. Compliance with the rules given in a recognised standard applicable to light steel frame building will be deemed to satisfy this requirement.
- d) Where calculations have been used in addition to, or in place of, test results, these are appropriate and accurate.
- e) All significant parts of the system have been evaluated.

APPENDIX B – ASSESSMENT PROCEDURE

This appendix defines the process to be followed in auditing any company or system on any stage.

Stage	Items accredited	Considerations	Assessment process	Info to be submitted
1 System	Concept and design of the steel frame, or of structural elements such as roof trusses	Whether the concept and design of the steel structure meets the requirements of all the relevant codes of practice, and whether the design of the system allows adequately for the following trades. Also, whether the Person who is the holder of the rights to the system is equipped to give guidance, training and assistance to those inside or outside the company who will manufacture and erect the steel frame, or attach elements to it, directly or indirectly, to complete the building.	Study submitted documentation as well as additional material requested to assess whether all requirements are met. Request further material and interviews if required.	See Application Form 1
2 Manu- facturer	Production and assembly of steel frame or structural elements	Whether the Person has adequate competent personnel, equipment and systems to produce elements (wall frames, trusses, or whatever elements it may be making) to an acceptable standard, meeting the specifications of the system, the relevant codes of practice, and the specifications of the designer of the building. Also, whether the Person engages the services of an engineer and (at least) a lead draughtsperson with adequate insight and knowledge of	Study submitted documentation and any additional material that may be requested. Visit the Person: a) Confirm that the information supplied accords with reality b) Interview selected personnel to assess whether they have an adequate understanding of the system and of their own tasks c) Inspect tools and equipment to assess whether their condition and maintenance are adequate d) Check whether the systems and procedures mentioned in the submitted documentation have been implemented	See Application Form 2

Stage	Items accredited	Considerations	Assessment process	Info to be submitted
		structural engineering principles and the system.	<ul style="list-style-type: none"> e) Check whether the steel elements produced actually meet the standards, without special effort in the presence of the Assessor(s) f) Assess general housekeeping and safety 	
3 Erector	Erection of steel frames and trusses on prepared foundations or supports	Whether the company can and does erect steel frames that meet the specifications of the system, the relevant codes of practice, and the specifications of the designer of the building.	<p>Study submitted documentation. Visit one or more construction sites:</p> <ul style="list-style-type: none"> a) Confirm that the information supplied accords with reality b) Inspect the works to assess whether the final product meets the specifications of the system, the relevant standards, and the specifications of the designer of the building. c) Check that the necessary documentation is on site, including: <ul style="list-style-type: none"> i. Drawings and specifications ii. Safety plan d) Interview selected personnel to assess whether they have an adequate understanding of the system and of their own tasks e) Inspect tools and equipment to assess whether their condition and maintenance are adequate f) Check whether the systems mentioned in the submitted documentation have been implemented g) Check whether the completed steel frame and trusses actually meet all the relevant standards h) Assess general housekeeping and safety i) Do unannounced inspections on random basis of construction sites. 	See Application Form 3
4 Builder	Completion of the shell (roof, walls, ceilings, floors,	Whether the outer shell of the building and the internal walls	Study submitted documentation. Visit one or more construction sites:	See Application Form 4

Stage	Items accredited	Considerations	Assessment process	Info to be submitted
	<p>plumbing, electric wiring, attachment of fixtures) of the building, to the extent that the element is peculiar to steel (or timber) framed building, or has a direct or indirect interface with the steel frame.</p> <p>Specific items to be considered:</p> <ul style="list-style-type: none"> a) Roof cladding b) Ceilings, with insulation c) Construction of external walls, with thermal insulation and weatherproof properties d) Construction of internal walls with sound insulation e) How windows and doors are built into walls f) Interface between electric conduits or water pipes and steel structure g) Foundations h) Suspended floors with thermal insulation (if above non-interior space) or sound insulation (if above inhabited space) i) Attachment of sanitary fittings, kitchen 	<p>and the foundation, excluding the doors and windows as such, meet the specifications of the system, the relevant codes of practice, and the specifications of the designer of the building. Particular concerns are:</p> <ul style="list-style-type: none"> a) Whether all the correct materials are used b) Whether the materials were properly installed according to the manufacturer's prescriptions, and connected to the steel structure c) Whether the outer shell was built in such a way as to provide adequate resistance to the ingress of air or water from any feasible source. d) Whether there will be sufficient strength to carry heavy elements attached to the walls. e) Whether, on the basis of the available information, the foundations were properly designed and built accordingly f) Whether the general appearance is neat and acceptable 	<ul style="list-style-type: none"> a) Confirm that the information supplied accords with reality b) Inspect the works to assess whether the final product meets the specifications of the system, the relevant codes of practice, and the specifications of the designer of the building. c) Check that the necessary documentation is on site, including: <ul style="list-style-type: none"> i. Drawings and specifications ii. Safety plan d) Interview selected personnel to assess whether they have an adequate understanding of the system and of their own tasks e) Inspect tools and equipment to assess whether their condition and maintenance are adequate f) Check whether the systems mentioned in the submitted documentation have been implemented g) Check whether the completed building actually meets all the relevant standards h) Assess general housekeeping and safety 	

Stage	Items accredited	Considerations	Assessment process	Info to be submitted
	cupboards, etc to walls			