Name of Professional Body	The Institute for Timber Construction Southern Africa (ITC-SA)
Designation Title	Certified System Software Developer (Cert. SSD)

Short Description:
The designation of Certified System Software Developer (Cert. SSD) will be awarded to entities that have been audited and tested for compliance with all engineering codes of practice and material specifications applicable in the design of timber structures.

The Certified System Software Developer (Cert. SSD) will need to retain the services of Accredited Timber Engineers and Software Development Specialists, and be able to provide evidence of rational assessments and testing that was done to confirm compliance with the above.

CRITERIA FOR OBTAINING THE PROFESSIONAL DESIGNATION

For the Professional Designation to be awarded, an independent assessment must be passed, and must allow for a quality control system to manage the application of the mentioned software.

- **Board Examination/Competency Assessment**

To qualify for the designation of System Developer, applicant is required to provide documented proof of specifically the system design software being in compliance with the listed criteria below. Before confirmation of the set requirements, the System Software Developer will be referred to as a Probationary System Software Developer.

The pre-requisite for the awarding of this designation by the ITC-SA, will be an independent audit and testing that will need to be conducted by an independent competent person recognized by the Engineering Council of South Africa (ECSA) and the ITC-SA. The following people are considered competent by the ITC-SA and ECSA, and will be able to confirm compliance with the industry related requirements as stated below;
*Dr. Wally Burtzik (University of PTA)
*Mr. Tony Aimer   (ECSA Consultant)

Before confirmation of the set requirements, the System Software Developer will be referred to as a Probationary System Software Developer.

SYSTEM SOFTWARE DESIGN REQUIREMENTS:	
NO	**DESCRIPTION**
1.	Compliance with ACT 103/1977 (as amended)
2.	Compliance with SANS 10400 (specifically Part L and T, but not excluding other parts that are relevant)
3.	Confirmed compliance with SANS 10163 Part 1 and 2 (use of timber in a structural application)
4.	Confirmed compliance with SANS 10160 (loading code for all structures). Special attention must be given to; *exposed conditions *pitch of roof *wind loading (left, right and along the building)
5.	Dead load designs must be applied on the slope of the roof
6.	Live load designs must be applied on the plan of the building
7.	Point loads must be tested and applied at any position in the roof. Where accessibility will not be possible (1.4 meter height restrictions and less), the requirement may be removed.
8.	The design in alignment with SANS 10163 may use "limit state design" or "allowable stress" to confirm the structural adequacy of the roof structure
9.	VERY IMPORTANT, IS THAT THE DESIGN SHALL BE DONE IN ACCORDANCE WITH SA TMBER PROPERTIES AS AVAILABLE AND WHICH WILL MEET THE REQUIREMENTS OF SANS 10163 and grade in accordance with SANS 1783-2
10.	All bracing requirements shall be aligned with the requirements of SANS 10163, and SANS 10243 can be consulted in this regard.
11.	In reference to item 9 above, the System shall need to be able to demonstrate that the required testing in line with ENV 1075 have been conducted to demonstrate the ability of the proposed plate connectors in meeting the requirements of SANS 10163 for the structural and performance values
12.	The system developer shall also confirm and demonstrate the appointment of an in-house engineer that will be able to demonstrate the following; *Pr. Eng or Pr. Eng Technologist *Registration with the Engineering Council of South Africa (ECSA) *Having appropriate PI Insurance
13.	Lastly, and which will be pre-requisite for the awarding of this designation by the ITC-SA will be an independent audit and testing, that will need to be conducted by an independent competent person recognized by the Engineering Council of South Africa (ECSA) and the ITC-SA.

CRITERIA FOR RETAINING THE PROFESSIONAL DESIGNATION

In order to ensure the currency of professional knowledge and to retain the Professional Designation, the professional entity must be able to provide evidence of constant upgrading and revision of the software system in compliance with all engineering codes of practice and material specifications.

- **Continuing Professional Development (CPD)**

  o Members are required to provide proof to ITC-SA of their CPD activities.
  o Members are required to accumulate 4 CPD points anually by completing a range of accredited activities such as:

    ➤ Attendance at workshops, seminars and information sessions,
    ➤ Giving presentations to inside and outside groups,
    ➤ Running workshops,
    ➤ Writing articles for in-house and general publications.

  o The ITC-SA decides on the points each activity is worth.

  o The ITC-SA Technical Engineering Advisory Committee ensures that CPD activities and certification requirements are co-ordinated.

- **Code of Conduct**

  Designees must abide by the ITC-SA Code of Conduct.

- **Membership Fees**

  Ensure that membership fees are duly paid.

PROFESSIONAL DESIGNATION PROGRESSION PATHWAY

The Professional Designation progression pathway is:

- Probationary System Software Developer
- Certified System Software Developer

For more information on this Professional Designation, please visit www.itc-sa.org