BILIGOM®
INTERNATIONAL (Pty) Ltd
TIMBER THAT CAN BE 'TRUSS'-TED

BILIGOM FAQ's

- **How can cracking and end splitting of Biligom® be prevented?**
  - Biligom® recommends that all Biligom® timber and trusses be protected from the elements, both at the factory and on site. Repeated wetting and drying of the timber might make the end splitting and surface cracking worse. Biligom® is however placing anti-split plates on all ends of their stock before supplying to the industry. Biligom® also recommends that roller presses must be calibrated frequently to ensure that overpressure does not cause pressure cracks during this process.

- **What can be done if end splitting appears on the truss overhangs?**
  - Biligom® recommends using an anti-split screw on all truss to tilting fillet connections on overhang eaves in addition to the ITC-SA standard details i.e. double hurricane clips etc. This is a fast growing industry standard. It is also recommended to make use of your system providers anti split plate detail if required.

- **Does the surface cracking of Biligom® timber influence the structural integrity and strength?**
  - No, extensive studies have been conducted by the University of Stellenbosch and it was concluded that the surface cracks were purely aesthetic.

- **What can be done on excessive surface cracks if the roof is being erected or after the trusses have been manufactured?**
  - Biligom® recommends that the cracks be investigated by the roof designer or system engineer to determine the severity of the cracking as surface cracks do not influence the strength. If necessary, remedial measures as determined by the designer or system engineer may need to be implemented.

- **Is Biligom® cheaper or better priced than SA Pine?**
    - Biligom® is more or less priced the same as un-treated S5 S.A. Pine per m³. However, due to Biligom®'s strength values, less timber per m² of roofing will be needed with accompanying significant overall savings by using Biligom®. Biligom® is also more price competitive as the product is already treated.

- **What is the truss spacing's on a concrete Tile roof when using Biligom® 38x38 Battens.**
    - Biligom® recommends that you contact your system provider for more detail. Truss spacing of 900mm have been accepted by some Systems.

- **What is the truss spacing's on a Metal Sheeting roof when using Biligom® 50x50 Purlins.**
    - Biligom® recommends that you contact your system provider for more detail. Truss spacing of 900mm have been accepted by some Systems.

- **What is the truss spacing's on a Metal Sheeting roof when using Biligom® 50x76 Purlins.**
    - Biligom® recommends that you contact your system provider for more details. The truss spacing is determined by the slope of the roof and limited by the application of the mandatory point load of 1kN on the purlin. The roofing industry standard is a maximum spacing of 1500mm for all slopes but this can be increased by the system engineers depending on the strength of the material and the slope of the roof. Biligom® is uniquely positioned to take advantage of this due to its higher strength in bending.

- **What does "Biligom® structural grade" mean and why not S7?**
    - Biligom® is mechanically proof graded to an equivalent bending strength of S.A. Pine with S9 characteristic values. This equates to material which is 80% stronger in bending than a S.A. Pine Grade 5 (20.8 MPa. compared to 11.5 MPa.). The existing standard SANS 1707 for hardwoods does not cater for the Biligom® type of material and that is why with the help from SATAS, MiTek SA and the University of Stellenbosch, Biligom® developed their private specification which produces material to the "Biligom® structural grade".

- **Why is Biligom® stamped with a SATAS mark and not a SABS mark?**
    - "South African Technical Auditing Services Pty Ltd" (SATAS) is an ISO 17065 SANAS accredited Certification Body for different products manufactured to the relevant SANS standards. Certificate of Accreditation No C25 issued by SANAS dated August 25, 2015 refers. +- 75% of the structural timber manufactured in South Africa is certified by SATAS. Standards South Africa is responsible for the compiling of the National Standards previously known as the SABS Specifications. SATAS perform inspections to the requirements of these, or any other relevant international standard.

- **How do bracing rules apply to Biligom® roofing systems?**
    - Biligom® recommends that you use the same bracing rules and procedures as prescribed by your system provider or the ITC-SA Roof Erectors Handbook Volume 2.

- **What is the maximum truss span when using a Biligom® 38X76mm BC & TC?**
    - This is dependent on the applied loading and pitch of the roof. Biligom® recommend that you contact your system provider for more detail and to send your designs for engineer checking.

- **Is Biligom® heavier than SA-Pine?**
    - Yes, Biligom® is treated and it adds to its weight. SA-Pine weighs in at about 450kg/m³ un-treated and Biligom® weighs in at about 800kg/m³.

- **With what and why is Biligom® treated?**
    - In accordance with the SANS specifications, all hardwoods must be treated. Biligom® is pressure treated with Tanalith-E™ H2 (Interior above-ground). Tanalith-E™ is produced from recycled copper and organic azole biocides making it a green generation treatment Eco specifier that is safe for close human contact. The treatment provides long-term protection against wood borer, termites and wood decay (wood rot).

- **Will screws, nails and nail plates penetrate the harder Biligom® as easily as the softer SA-Pine?**
    - Nails and screws on Biligom® act in the same way as SA-Pine and have the same working characteristics. It must be noted that it is more difficult to un-screw screws and to remove nails from Biligom®. Biligom® does however recommend the use of the timber in a fresh or younger state as it does become harder with the aging process. Biligom® also recommends that roller presses must be calibrated frequently to ensure that it does not crack the harder timber. It can be said that there is no difference between the two woods when inserting gang nails via roller press.