

Egger Holzwerkstoffe Wismar GmbH  
Am Haffield 1  
23970 WISMAR GERMANY

April 1<sup>st</sup> 2014

**SUBJECT: 21mm EGGER Structural Sheet Flooring Panels  
Manufactured as EGGER OSB 4 TOP by EGGER branded EGGER OS'Floor  
Holzwerkstoffe Wismar GmbH & Co. KG  
Certificate of Structural Adequacy**

The design methodology presented in this product specification has been prepared in accordance with widely recognised engineering principles. In verifying and certifying performance characteristics for EGGER OSB4 TOP flooring panels, I have undertaken an independent analysis of I have undertaken an independent analysis of data obtained from testing undertaken by SCION (NZ) and over 2 years of production sampling data obtained from testing undertaken in accordance with EN 310, interpreted for application with AS/NZS 4266.5. I have also reviewed test reports of EGGER OSB product undertaken by DTI Taastrup (DK) and WKI Braunschweig (D) during 2000 and 2003 in accordance with EN 310, the bending tests of which are comparable to AS/NZS 4226.5.

In particular, the design methodology and criteria for applications using the flooring panels are based upon use of the following documents:

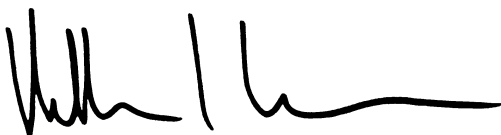
1. AS1684 – 2010 SAA National Timber Framing Code
2. AS1720.1 – 2010 SAA Timber Structures Code – Part 1 Design Methods
3. AS/NZS 1860.1 – 2002 Particle Board Flooring: Specifications (incl. Amendments 1 & 2)
4. AS/NZS 1860.2 – 2006 Particle Board Flooring: Installation (incl. Amendment 1)

Analysis of the test data indicates that the OSB flooring product as tested, meets strength & stiffness requirements specified in Table 3 of AS/NZS 1860.1 for Class 1 Particleboard, provided it is installed parallel to grain across the supporting floor joists. The spacing of the floor joists is not to exceed 600mm c/c. The strength perpendicular to grain meets the requirements for Class 2 Particleboard. However, the perpendicular to grain stiffness is below the threshold value of 2650 MPa.

Therefore, the following restrictions apply in order for EGGER OSB4 TOP flooring panels to comply with the requirements of the Building Code of Australia:

- 1) Flooring panels must laid with the major (parallel to grain) axis cross wise over the supporting floor joists, at a maximum centre to centre spacing of 600mm.
- 2) The major axis direction must be clearly marked on each panel surface, with the text "use only in major axis"
- 3) Laying floor panels with the perpendicular minor axis crosswise to joists is not permitted
- 4) Nail fixings and screw fixings shall be in accordance with AS/NZS1680.2, Tables 1 & 2 respectively. All other installation details shall comply with the requirements of this standard.

It is also noted that an accredited independent Testing Laboratory ("Notified Body") undertakes Third Party Auditing of factory production control of OSB according to EN 300:1997 in conjunction with the building product guideline EN 13986:2004. The mean density of the OSB product is > 600 kg/m<sup>3</sup> at a tolerance of +/- 10% (evaluation acc. EN 323:1993) and a moisture content of less than 12% in accordance with EN 300:1997.

A handwritten signature in black ink, appearing to read "Keith I Crews". The signature is fluid and cursive, with a long horizontal stroke at the end.

Keith I Crews  
BE(hons) MEng(res) PhD  
MIABSE FIAgrE FIEAust CPEng, NPER – 3 (No: 238529), RPEQ (No: 9659)  
Professor & Consultant