

Structural Quick Start Guide

SP-030, Version 1.0, November 2022



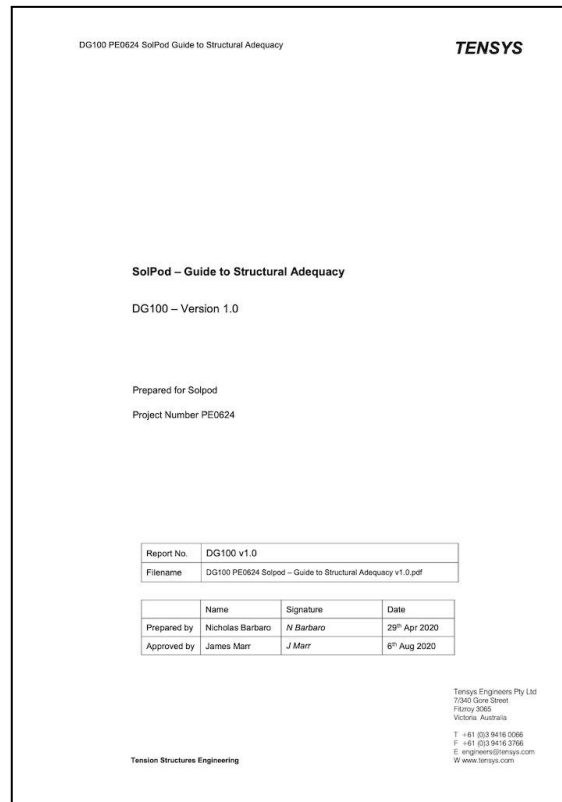
Solpod v4 (patent pending)



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Introduction

Solpod publishes a comprehensive guide to structural adequacy, DG100, available [on our website](#). This document offers a ‘quick start guide’ for structural engineers, enabling them to check whether a building frame is able to support an array of Solpods.



Solpod Guide to Structural Adequacy

Quick Start Guide

For a typical commercial roof in Wind Region A, Terrain Category 3, Roof Height 10 metres, the roof frame needs to be able to withstand the following Ultimate Limit State design loads:

- Permanent (additional) dead load:
 - 150 Pa, i.e. the weight of the Solpods
- Live (wind) downward load:
 - 580 Pa in edge zones*, i.e. $395 \text{ Pa} + 1.2 \times 150 \text{ Pa}$
 - 300 Pa in centre zones, i.e. $118 \text{ Pa} + 1.2 \times 150 \text{ Pa}$
- Live (wind) uplift load:
 - -280 Pa in edge or centre zones, i.e. $-414 \text{ Pa} + 0.9 \times 150 \text{ Pa}$
 - -680 Pa for cladding and purlins** only within edge zones*, i.e. a local pressure of $-811 \text{ Pa} + 0.9 \times 150 \text{ Pa}$

* edge zone as defined in the DG100 report and subsequent advice refers to 'h' of an eaves edge, or '2h' of a gable edge.

** cladding and purlins in this sense refers to the part of the roof directly supporting the Solpod (typically this will be the timber/steel purlin {if the Solpod is screw fixed to the purlin} or both the purlin and the roof sheet {if the Solpod is fixed to the roof sheet using roof clamps or adhesive tape}).

For further information contact Solpod on info@solpod.com.au.