
**Timber structures — Test method
— Static load tests for horizontal
diaphragms including floors and roofs**

*Structures en bois — Méthode d'essai — Essais de chargement
statique pour les diaphragmes horizontaux incluant planchers et
toitures*

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Foreword

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Introduction

Horizontal diaphragms including floors and roofs are integral parts of light-frame timber buildings to show resistance against horizontal forces such as winds and earthquakes. Their characteristics such as ultimate shear strength have great effects on the behaviour of timber buildings including horizontal diaphragms as floors and/or roofs under winds or seismic loads.

Horizontal diaphragms are those structures which are widely used for timber buildings to form floors and/or roofs. They behave as a simple beam or cantilever beams under horizontal loads caused by wind or earthquake to transmit forces to the structures or structural members supporting them. Horizontal diaphragms should have enough stiffness and strength that they do not undergo large deflection or failures in parts of the structure.

The purpose of this International Standard is to measure the shear stiffness and strength of horizontal diaphragms as one of the basic parameters to interpret the behaviour of diaphragms under horizontal loads such as winds and earthquakes. The requirements are necessary to replicate the same conditions as those for timber structures in the field. Loads can be applied to the specimen either by compression or tension whichever is relevant.

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