XLam AirStair®

RESIDENTIAL, COMMERCIAL, INDUSTRIAL

XLAM

XLam provides time-efficient and easy to install building products fabricated from CLT (Cross Laminated Timber).

XLam CLT AirStairs are a popular product that support rapid construction and greener buildings.

Supplied ready to install, AirStair flights are machined from solid XLam CLT and can be supplied with landings. XLam AirStair are suitable for residential, commerical and industrial applications.

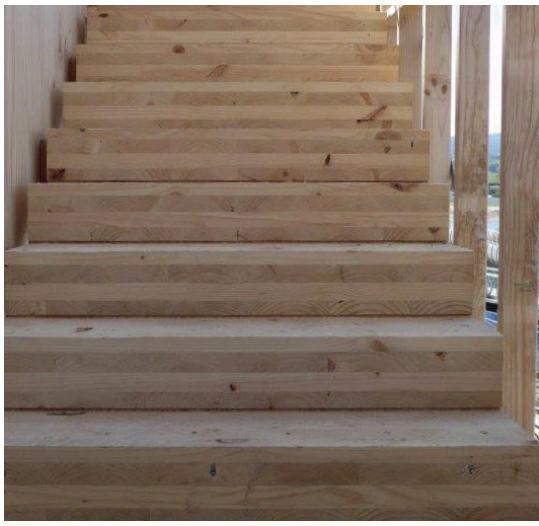
AirStair®

Traditionally, stairs and landings in large commercial construction projects are produced using formwork or prefabricated steelwork into which concrete is poured. Poorly constructed stairs and landings can contribute to occupational health and safety risks.

A key factor in constructing and installing stair systems into a project are: stair geometry (shape), dimensional uniformity, and slip resistance of surfaces. Ensuring each element in the production of stairway systems is critical to ensuring occupant safety in a building. AirStairs are designed using a CAD based system to ensure critical details are not missed, then the stairways are manufactured in a controlled environment off-site with precision detail.

Accompanying a set of stairs are landings. Landings are the areas located at the top and bottom of the stairs by which access is made to the stairway. Stairways may have multiple landings to provide access between floors with large distances. Constructing stairways and landings on a project can consume considerable time, labour and cost (resources).

AirStair is cheaper, lightweight and much quicker to install than conventional precast concrete stairs. Combine AirStair with prefabricated CLT landings for a perfect partnership.



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CASE STUDY: UNIVERSITY OF TASMANIA STUDENT APARTMENTS

The University's National Rental Affordability Scheme apartments at Inveresk is Tasmania's first timber multi-storey residential development, located on the banks of the North Esk River beside the University's Inveresk campus.

The development comprises 120 apartments across two three-storey buildings, connected by common social spaces, external landings and stairs. Technical expertise was provided by the University's Centre for Sustainable Architecture with Wood. The promotion of sustainable construction for the Tasmanian timber industry was a key CSAW objective.

The design team with Hutchinson Builders developed a prefabrication enterprise close to the construction site. The modular apartments were fully framed, clad and fitted out in an assembly line process, then delivered to site, stacked, and connected. They were then linked with a series of access landings, stairs and common areas, constructed in XLam CLT in conjunction with structural steel frames.

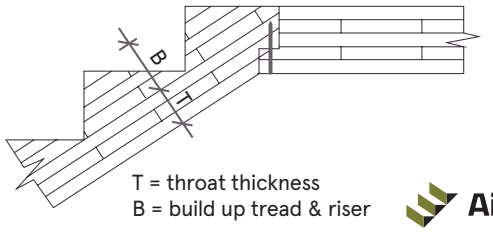
"Prefabricated volume modules and CLT connecting floors and walkways, working in combination, were deemed to be the most suitable light weight construction for the prevailing 18m deep silt river bank site conditions and, in conjunction with the speed of prefabricated construction, were instrumental in making the project feasible." — **David Bylund**, UTAS School of Architecture and Design

"The XLam AirStairs took a fraction of the erection time we expect for precast concrete stairs. If I had realised how quick it would be we would have dispensed with the temporary stair." — **Nick Scott**, Hutchinson Builders Project Manager

AIRSTAIR SPAN TABLE

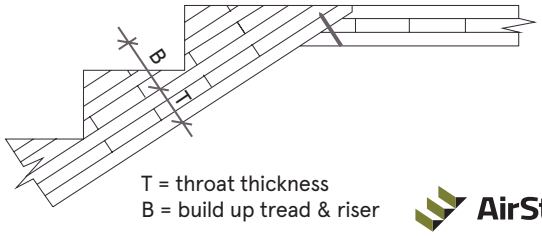
Throat thickness (mm)	2kPa RESIDENTIAL	4kPa COMMERCIAL
75	2.48	2.31
85	2.70	2.54
105	3.35	3.20
115	3.55	3.26
135	4.35	4.00
150	4.76	4.38
175	5.37	4.89
195	5.70	5.16
225	6.20	5.62

Typical connection detail



T = throat thickness
B = build up tread & riser

AirStair



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XLam Technical Guides

XLam have prepared a comprehensive set of technical guides as specification documents.

Please visit xlam.com.au to access the guides online under the "Technical" section.

For technical support or to request pricing please email:
Australia: enquiries@xlam.com.au