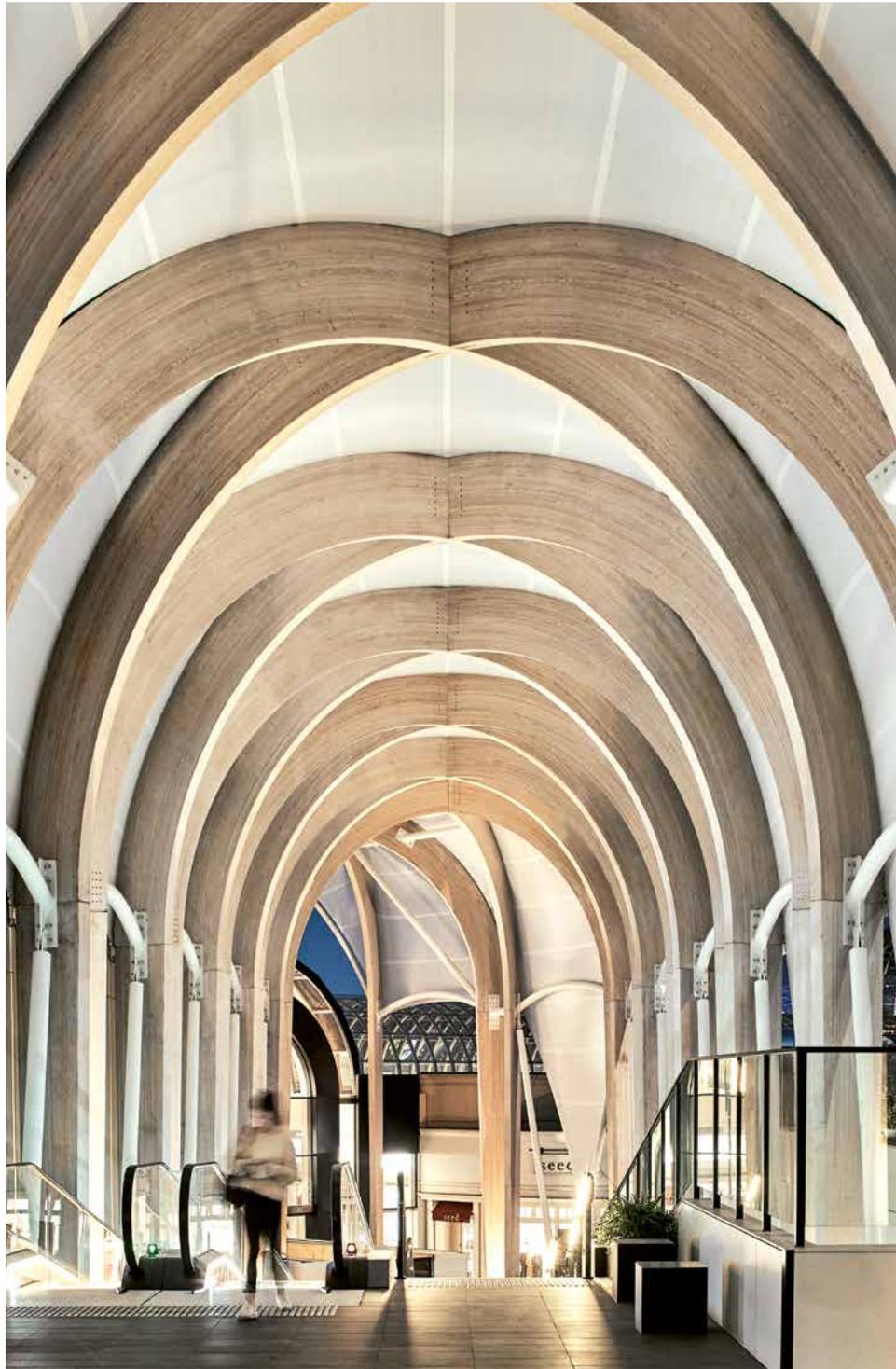




CHADSTONE LINK

INNOVATIVE LINK

A total of 15 cross-shaped timber vaults made of larch glulam provide the special and characteristic form to the Chadstone Link in Melbourne, Australia. This eco-friendly passageway that has been designed for pedestrians guides the visitors from the neighbouring office buildings, the adjacent hotel, and parking areas to Australia's largest Shopping Centre with its more than 530 shops and 20 million visitors per year.



Starting from the arched glass roof of the Shopping Centre, we have designed a 110-metre long, arched passageway, which is based on a diagrid structure made from Italian larch glulam and topped with a stretch-resistant, semi-transparent PTFE canopy. Despite the openings in the edges of the structure, provided for cross ventilation, the design is extremely robust", describe the architects of "Make Architects" their Chadstone Link.

The new point of attraction in this Chadstone Shopping Centre located in Melbourne, Australia is this eco-friendly passageway for pedestrians made of larch glulam. Despite the shopping hustle that is caused by 20 million visitors a year, this passageway offers a relaxing and natural environment, which has been designed as el-

egant and weatherproof promenade. With its height of up to 15 meters, the structure harmonically and seamlessly blends with the surrounding environment.

Walking through the Link creates a feeling of pacing through cathedral aisles. The main function of the 31 diagonally aligned timber arches is to lead the visitors - who either come from the neighbouring hotel and office buildings of the Vicinity Centres or from the surrounding, more than 9,300 available parking spaces - to the main entrance of this Shopping Paradise. In the night, the mixture of light show and breathtaking timber construction provides an impressive and monumental shopping setting. Bent (between the arches) and straight (to the floor) hollow steel profiles provide for the stiffening of the arches, which

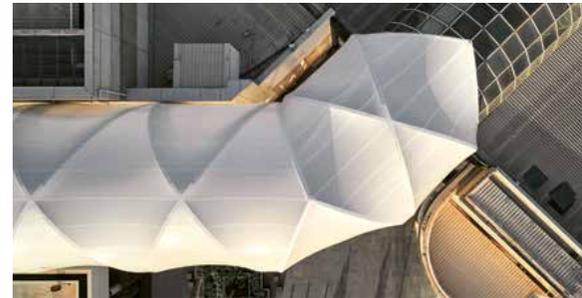
pairwise form a portal unit. A total of 31, differently dimensioned and individually designed larch timber elements with measures ranging from 3 to 15 meters in height combine to 15 structure-supporting timber arcades. These elements intersect in their ridge point where they are covered with fabric. In its upper third, the larch glulam has been bent to a tight radius. However, despite this strong curvature, the timber elements can easily resist the acting mechanical stresses due to their technical properties.

Within a period of only 20 weeks, Rubner Holzbau supplied all timber elements for this timber-textile entrance area to the „Chaddy“, as Chadstone Shopping Centre is colloquially and affectionally called. After only 4 weeks, the first prototype had been concluded and after



additional 4 weeks all production drawings had been completed. The very tight schedule set between the signing of the contract, design, production and delivery of the prototype and actual assembly could only be met by constant interaction between architects, project owner, general contractor, certifiers and Rubner's

engineering team. The scope of works not only comprised execution design but also workshop and assembly planning, prototype design and fabrication of timber arches as well as transport and local project management.



Completion: 2019

Project implementation: Timber construction April 2019 to September 2019

Total project implementation: April 2019 to November 2019

Building owner: Vicinity Centres PM Pty Ltd, Chadstone (AU)

General Contractor: Hickory Chadstone PTY LTD., Richmond (AU)

Architects: Make Architects, London (UK) and Sydney (AU)

Cera Stribley Architects, Prahran (AU)

Structural design: Robert Bird Group, Melbourne (AU)

Timber engineering: Rubner Holzbau Brixen (IT)

Details: 160 m³ of glued laminated timber (larch)

6,000 kg of steel elements (except for the stiffening)

Photography: Peter Bennetts