

KINDERLIN



Fabricator

Arch System Fabrication Pty Ltd

Capral Products

AGS 225 Hinged Door
Artisan 995 Folding Window
AGS 601 Narrowline Offset Single
Glazed
AGS 400 Narrowline Single Glazed
AGS 50 Awning Sash

CAPRAL
ALUMINIUM

NUTURING INNOVATION: KINDERLIN'S EARLY LEARNING PLAYGROUND

Located in Rouse Hill, New South Wales, Kinderlin Early Childhood Learning Centre represents a harmonious blend of design and nurturing spaces made possible through the innovative use of Capral Aluminium systems.

From the start, Kinderlin was envisioned as more than a typical childcare centre. Drawing inspiration from Australia's natural landscape, the centre features an 'Australiana' theme, evident in its architecture and design. This approach creates a cohesive environment that celebrates the country's culture and biodiversity, offering children age-

appropriate outdoor areas set against a picturesque Australian bush backdrop.

The architectural design of Kinderlin posed several challenges, especially in creating large, open spaces with high ceilings and extensive glazed areas.

Capral Aluminium's advanced systems, such as the AGS Commercial 225 Hinged Door, Artisan 995 Folding

Window, AGS Commercial 601 Narrowline Offset Single Glazed, AGS Commercial 400 Narrowline Single Glazed, and AGS Commercial 50 Awning Sash, provided the perfect solutions to meet these needs.

The AGS Commercial 225 Hinged Door was used throughout Kinderlin, especially in high-traffic areas requiring





durability and security. At the main entrance, this system offers a welcoming yet secure entry point with advanced locking mechanisms. In areas leading to outdoor play spaces, the 225 Hinged Door system enables wide openings, facilitating a smooth transition between indoor and outdoor environments.

The Artisan 995 Folding Window system played a key role in enhancing the flexibility of Kinderlin's spaces. This versatile system allows entire walls to fold away, merging indoor activity areas with the outdoors. During good weather, the folding windows extend the learning environment into nature, providing children with fresh air and a sense of freedom. The robust construction and smooth operation ensure safety, even when young children assist in opening or closing the windows under supervision.

Capral's AGS Commercial 601 Narrowline Offset Single Glazed system maximizes natural light while maintaining a strong visual connection to the outdoors. Its slim profiles allow for larger glazed areas, creating bright, open spaces that connect with the surrounding landscape. The 601 system's excellent thermal performance ensures comfort throughout the year, making it ideal for nursery and quiet areas.

The AGS Commercial 400 Narrowline Single Glazed system balances natural light, ventilation, and privacy. This system is perfect for areas needing adjustable windows for airflow while maintaining security. In administrative zones, the 400 system offers ample light and ventilation, enhancing comfort while ensuring acoustic privacy.

The AGS Commercial 50 Series Awning

system was utilized for controlled ventilation. This system allows windows to open partially from the top, promoting fresh air circulation while maintaining security. It's especially useful in sleeping areas, enabling staff to adjust airflow without disturbing resting children. The system's smooth operation and secure locking mechanisms ensure easy, child-safe use.

Arch System Fabrication was instrumental in implementing Capral's systems at Kinderlin. Their expertise was essential in overcoming the project's structural challenges, particularly incorporating expansive bi-fold doors with complex design elements like raking heads and large highlights. One of the most ambitious aspects was the installation of bi-fold doors spanning five metres in height. These required a custom support



KINDERLIN WAS DESIGNED TO INTEGRATE INDOOR AND OUTDOOR SPACES SEAMLESSLY, PROMOTE SUSTAINABILITY, AND PROVIDE A DYNAMIC SETTING FOR YOUNG CHILDREN'S DEVELOPMENT.

system due to the weight of the glass and wind loads.

Arch System Fabrication collaborated closely with Inhabit Façade engineers to create a bespoke support structure using 100 x 100 box sections to reinforce the transom and door head track. This solution provided the necessary structural integrity while seamlessly integrating highlights up to three metres high. Their innovative approach ensured the design vision was fully realized without compromising safety or functionality. The partnership between Capral Aluminium and Arch System Fabrication resulted in a state-of-the-art childcare facility that meets both the practical needs of a learning centre and the aesthetic goals of an inspiring architectural design.

Kinderlin Early Childhood Learning Centre is a testament to how thoughtful, innovative solutions can overcome complex challenges, creating a space that fosters exploration, learning, and a connection with nature. The project's successful integration of sustainable features and advanced building systems sets a new standard for early childhood education facilities, demonstrating what's possible when design and functionality work hand in hand.

