So why choose Danthonia?

It looks great.

Three-dimensional

3D signage is eye-catching and makes a strong statement of quality and authenticity. Real dimension creates real shadows, resulting in a more striking result than digitally printed images.

Flat signs lack the visual impact of three-dimensional signs. Materials used in flat signs (vinyls, digital prints) also tend to have a shorter life expectancy than acrylic paints.
Integration of electronic signage

All the static and electronic components are smoothly integrated into one highly resolved sign. From the concept stage on, your sign is custom designed and engineered to combine the best technical design with exceptional artistry.

For example, the slim, low-profile screen is set discreetly into the sign with just enough space for passive convection to cool the electronics, but out of sight of viewers. Even the temperature sensor, disconnect switch, and light sensor for brightness adjustment are all part of the perfectly resolved end result.

Some signage appears piecemeal and unfinished, with no apparent visual connection between the components of the sign. Bulky LED cabinets or front-venting louvers are visually distracting.

SMD pixel construction

In order to give you the best resolution, colour and image quality, full colour screens are constructed with Surface Mount Device (SMD) pixels. Each SMD pixel has three LED chips (red, green, and blue) mounted together and encapsulated in a translucent polymer. These three colours mix to create over a million shades of colour. The close proximity of the chips mounted in one pixel results in excellent colour and high image quality.

Dual In-line Package (DIP) is another type of pixel construction available. This is appropriate in certain circumstances, but is normally only used on lower resolution screens which are viewed from a distance. Each DIP pixel is made up of four individual LED bulbs (two red, one green and one blue). Image resolution and colour quality on DIP screens is generally not as good as SMD, unless the sign is viewed from far away.
Wide viewing angle
SMD pixels are not only small, they are also very thin, creating a slim profile. This low profile is what gives you a wide horizontal viewing angle of 140 degrees because the SMD pixel does not block the view of the neighbouring pixels.

Each bulb in a DIP pixel has a very pronounced profile that blocks out the light produced by other bulbs when viewed from the side. If you’re viewing a DIP screen head-on, the colours look OK if you are far enough away from the screen. As soon as you move to either side (think of passing traffic), the image quality deteriorates, because you can no longer see all of the LED bulbs in each pixel.

High resolution
The resolution or ‘pitch’ of an LED sign is an extremely important consideration because it is one of the main cost drivers. (Resolution is measured by the number of millimetres between pixels. Industry terminology for this is pitch. For example, P6.67 screens have a 6.67mm pitch.) The higher the resolution, the smaller the pitch and the more pixels required. The number of pixels, in turn, directly affects the price and the quality of the image.
So why choose Danthonia?

It’s long-lasting.

Rust-free aluminium posts

Pylons are custom-extruded marine-grade aluminium so you will not have a problem with rust. Pylons are powder coated for extra scratch-resistance. All posts, footings and hanging systems are engineered and fabricated to comply with AS1170.2, the Australian Standard for wind loads.

Steel posts are susceptible to rust. Hot-dip galvanizing only offers adequate protection if fabricated structures are galvanized after final fabrication, an expensive and time consuming process.
No weather ingress

Weather-resistant sign panels are carved and sculpted from High Density Urethane (HDU), a waterproof, insect-proof and fire retardant material. HDU will not crack, split, swell or rot in the elements.

Structures that are bolted, screwed, or glued together deteriorate in exterior applications. The joints open up, corrosion sets in and the structure becomes unsightly as it ages.

Paint

Signboards are painted with Dulux Weathershield paints, which are incredibly fade-resistant. Danthonia’s extensive testing and field experience have shown that a combination of HDU covered with Dulux Weathershield yields an exceptionally weatherable sign surface. The water-based 100% acrylic paint has excellent adhesion, UV resistance and colour-fastness. Weathershield’s unique MaxiFlex stretch technology offers a tough flexible finish. Dulux uses UV resistant mineral pigments so most Weathershield colours show no significant fading for 10–12 years.

Digital prints will fade over time when exposed to UV. Even when coated with protective coatings, the life expectancy of a digital print is far less than acrylic paint. There are many grades of vinyl available, which vary widely in UV resistance and durability, but all vinyls deteriorate with prolonged UV exposure, and are susceptible to cracking and peeling.
No fans’ thermal management

A reliable and effective cooling system is essential to the longevity of an LED display; excessive heat causes LED bulbs to deteriorate over time. We have engineered an effective cooling system for our tiles that uses passive convection. This eliminates cooling fans and other failure prone componentry. It doesn't get more reliable than that.

Cabinet style displays require fans to remove trapped heat. Fans not only consume energy and produce additional heat, they are also ‘moving parts’ and therefore susceptible to failure. The cooling fans pictured here succumbed to corrosion in a coastal environment.

Efficient LED chips

Our efficient ‘high brightness chips’ require minimal energy input and produce minimal heat, prolonging and preserving the life of the sign. Your sign will have a brightness of at least 6,000cd/m² (or ‘nits’) and the LEDs are rated at 100,000 hours to 50% brightness. This means that you would need to run your sign at maximum brightness, non-stop, with every bulb lit up for over 10 years before the LED bulbs reach half-brightness.

Most LED displays are bright when you first install them, but lower quality chips require more energy to produce adequate brightness. This additional power produces heat which shortens the lifetime of the LEDs, causing them to fail prematurely. It is impossible to evaluate the quality of a chip used by inspecting a sign. The warranty on a sign is an indicator of the confidence of the manufacturer.
Power supplies
Power supply failure is a frequent reason for display outages. That is why we spray our power supplies with a conformal coating. This is a waterproof coating that is applied to the circuit board after it is assembled to protect it from the detrimental effects of moisture and corrosion.

Many LED manufacturers omit this process as it increases costs and is difficult for a customer to detect – until something goes wrong.

Waterproof
Our LED displays are constructed from sealed waterproof and dust-proof 320mm square tiles. The LED tiles are rated at IP67. Simply put, these tiles can be fully submerged in water.

Safe
Our LED signage has been electrically tested by Australian Safety Approval (ASA) and meets certification standard AS/NZS 60950.1:2011 +A1 for suitability.

Anti-graffiti coating
Your sign will be protected against graffiti with a permanent type graffiti protective coating that will not create glare or yellow with age. This coating can withstand repeated cleaning cycles.
So why choose Danthonia?

Everything is easy.

LED sign software

Web-based software allows you to change messages from your PC, phone, tablet, laptop and other mobile devices. All you need is an internet connection.

There is no requirement for you to install software and no IT involvement from your end. In addition, you don’t need to install any apps or plug-ins and the software works with all the popular browsers (Internet Explorer, Google Chrome, Mozilla Firefox, Apple Safari, Android browser and Opera).

Software installed on a local PC ties users down to one computer.
No software installation

You’ll never have to install or re-install software, install upgrades or reconfigure your sign. We are continuously improving the website and adding new features remotely.

Every time the software needs to be re-installed or upgraded, the connection to the sign needs to be reconfigured. All of this is avoided with web-based software.

Highly secure

The combination of 3G connectivity and web-based software means the LED sign is outside of your secure network, not compromising the security of your network in any way.

There are inexpensive ways to connect LED displays to networks which are insecure and may not be approved by your IT policy. In general Bluetooth connections are not allowed by any security-conscious organizations. WiFi must be enterprise grade and have adequate security measures enabled.

3G data connection

To change messages on your sign, you log on to your secure, password-protected online account, update your messages and click ‘Send.’ Immediately, your sign will start displaying messages via a secure 3G mobile connection. Your messages travel from your device to the website and from the website to the sign via encrypted SSL.
No data installation

Employing 3G data services for the connection to your sign means that there is no wireless equipment, cables or fibre to install or maintain. Neither are there set up costs.

Direct wired connections (copper) which are buried underground must have optic isolators at both ends to prevent damage from lightning surges and must also be of adequate quality.

No ongoing costs

The 3G data usage required for your sign is included in your purchase price – there is no ongoing cost to you. Training is free and ongoing. We take care of all maintenance and upgrades to the LED sign control website: ask us for a demo. The 3G data usage required for your sign is included in your purchase price.

Quick lead time

A two-post sign will be ready to ship in three weeks; a monument sign in five weeks. Because design and fabrication are in-house, we have full quality control over every process from the ground up. All components of every sign are fully assembled and thoroughly tested in our New South Wales factory prior to shipment.

Installation

Before your sign leaves our factory everything is fully assembled and pre-configured for a trouble-free installation. Our installation team prepares and pours the footings in advance so when the sign arrives it can be installed right away. If you choose to handle the installation yourself, we provide a free installation kit, template, instructions and phone support.
Easy to repair

The LEDs (bulbs) are protected by tough polycarbonate shields. However, in the event of vandalism, the display can be easily repaired without even turning off the sign. The LED display is made up of 320mm x 320mm tiles mounted on a frame. You simply leave the LED screen powered on, remove the damaged tile(s) with a key, which we provide, and swap in a new tile. This spares you the cost of replacing the entire display.

Danthonia LED displays can be repaired without an electrician and without needing to isolate and lock out power to the sign. This represents a significant saving in terms of labour and time. We keep spare tiles in stock and tile swap-ins take only a few minutes.

While a modular design is typical of LED displays, most displays can only be serviced by access into the display cabinet which contains live 240V power. This requires a licensed electrician to carry out the repairs.

Support

It’s not every day you install a sign at your school, but it is every day for us. That’s why, when you ask Danthonia to take care of your sign project, you can be assured that we will take care of every last detail for you. For example your rep will assist you in everything from deciding on the best site, to tips on how to make the most of your LED display.

From the initial phone call and design phase, to sign proposal and installation, we entrusted the Brisbane Boys’ College brand with Danthonia Designs, and were without regret.

Nicole de Vries, Director of Marketing
Brisbane Boys’ College

It was so easy to get the project done. All Danthonia staff were incredibly helpful from design to installation which made getting the job done so much easier.

Ian Masarei, Principal
Leonora District High School