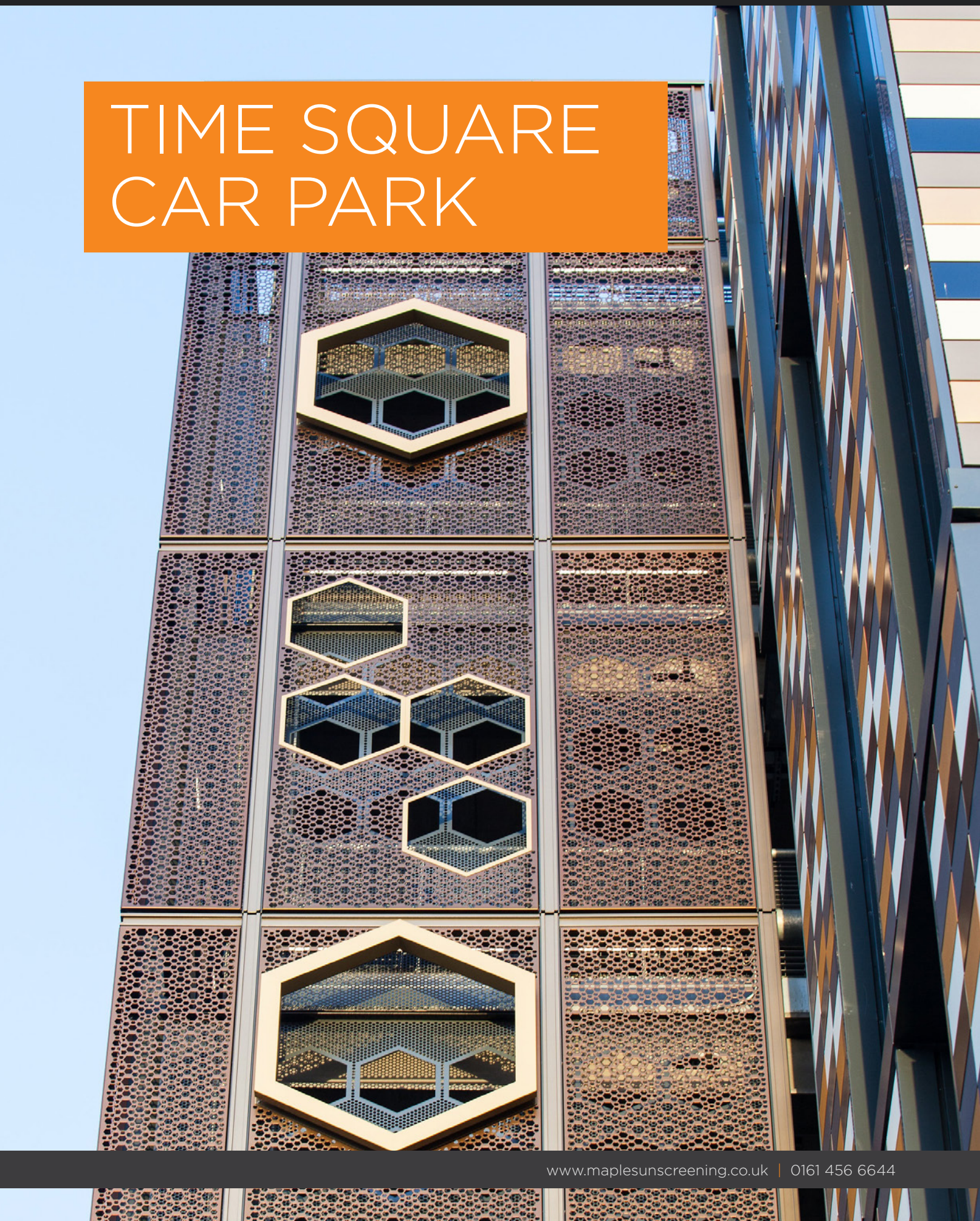


# MAPLE

## TIME SQUARE CAR PARK





# MAPLE'S ARCHITECTURAL FAÇADE STRIKE GOLD FOR WARRINGTON CAR PARK

Maple help architects turn local history concepts into practical reality for Warrington multi-storey car park as new Time Square development takes shape

## KEY FACTS

- Striking architectural façades for eight-level car park
- Design inspired by Warrington's local heritage
- More than 1,700 powder-coated, aluminium panels
- Bespoke 'sliding' fixings for building tolerances and movement
- Close partnership with architects and contractors
- Every milestone met
- Maple rated 'excellent' by architects

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Leach Rhodes Walker,  
Lead Designer

Ka Yin Man



## BACKGROUND

The £107m regeneration of Warrington town centre will feature a 'golden' car park that takes its inspiration from local history and a famous landmark.

The Cheshire town is well-known for the golden gates that have stood outside the Town Hall for more than a century. So, when architects Leach Rhodes Walker were tasked with designing a multi-storey car park to complement the new Time Square development, their solution was gilt-edged.

However, the architects also took inspiration from Warrington's historic wire rope trade to create a design that would reference and relate to the urban aesthetic and enhance the overall visitor experience.

Their concept was a façade of back-lit perforated panels with golden hexagon cut-outs covering the main facades of the large 1,200 space multi-storey.

### The architect's concept

We wanted to produce an individual design that was immersed in the history of the area and was of relevance to the town," said Ka Yin Man, lead designer at architects Leach Rhodes Walker. "The hexagon shape originates from the time Warrington had a thriving 'wire rope' trade - the 'Warrington Rope' uses three sizes of wire in a hexagon construction for strength. Working with Maple helped us understand what could be done. I remember the attention to detail - from the gold colour to the hexagon design."

## CHALLENGE

Over the years, car parks have been among the ugliest and controversial buildings in towns and cities. So, recent designs have cloaked the framework in architectural façades that not only shield the open interior from wind and rain but also add visual impact.

Having developed an expertise in car park design, and on this project along with other car park projects, architects Leach Rhodes Walker have partnered with Maple to transform their designs for the 1,200-space car park into something that was both practical and aesthetically striking. However, covering every side of the eight-storey car park in perforated panels with golden hexagon cut-outs presented significant challenges of scale and design.

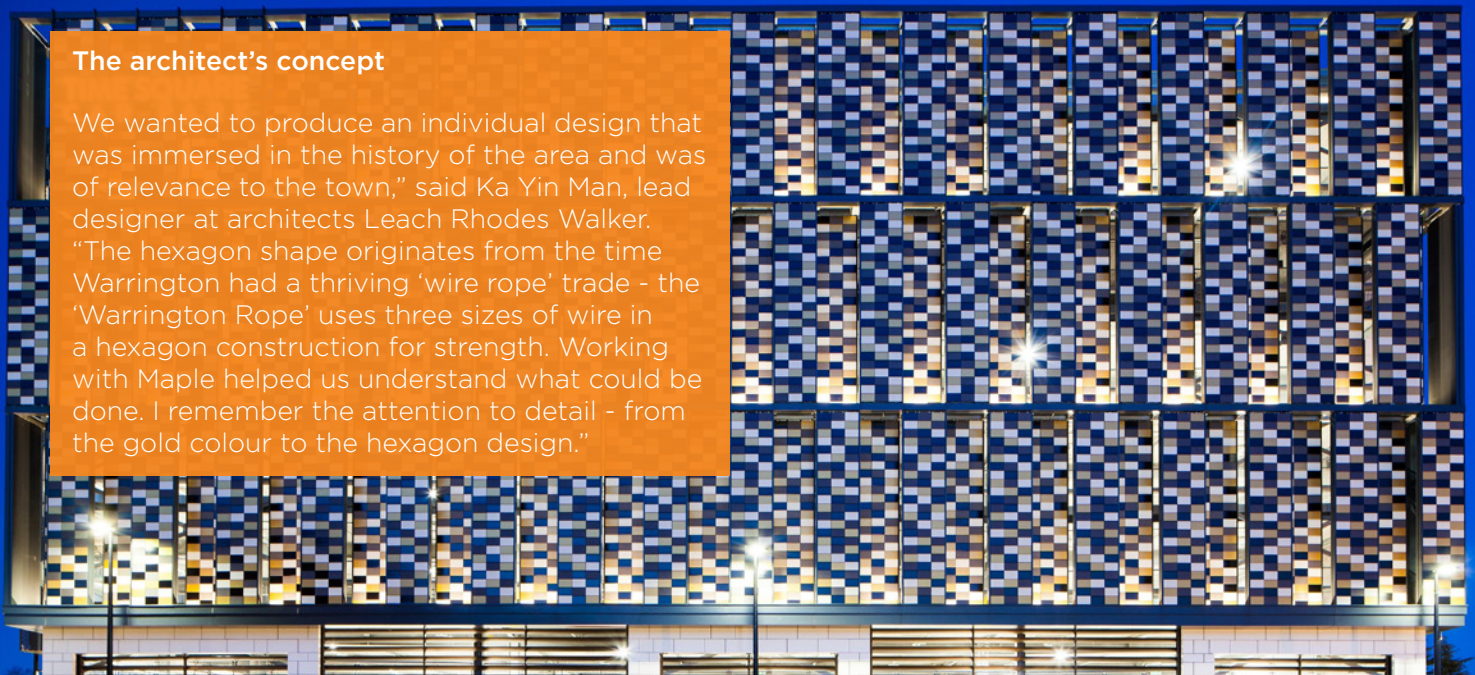
The double-skin building construction required 735 panels for the exterior and 980 for the interior. Each panel was 3m high and 1.3m wide,

and had to be installed in such a way to allow for normal building tolerances and movement.

Maple and the architects also had to work together on challenges of health and safety - positioning the inner and outer layers in a way that people couldn't climb through the largest hexagons.

### Wind noise

The distinctive design of the panels threw up another unexpected challenge - wind noise. During the design phase, 'wind studies' were conducted to determine if the perforations and cut-outs would lead to whistling. "We started with a regular hexagon shape that ended up as an irregular hexagon to reduce wind noise," said LRW's Ka Yin Man. "Maple worked with us to find the best design options without compromising the concept."





## SOLUTION

The panels were fabricated in a lightweight but durable aluminium, but still required more than 87 tonnes of material overall. The panels, which were laser-cut with hexagon-shaped perforations, were anodised and powder-coated for weather durability.

They were fixed to a frame of extruded mullion sections with concealed fixings and a clip-on cap cover. The design also incorporated hidden sliding mechanisms to allow for building tolerances and natural movement.

Creating the design was only the start of a complex process. Our team of specialist installers took 12 weeks to install the 1,700 panels - over an area equivalent to an average football pitch.

## Prototypes

The project was one of the first to use the new dedicated prototype area at Maple's factory in Stockport. The architects and contractors I & H Brown Construction were able to view real-life examples of the bespoke perforated panels and golden hexagon cut-outs - at actual size. The prototypes were powder-coated in the specified colour, and fitted to the display framework using actual fittings - meaning that any changes to the design or specification could be made without it having a major impact on timings or budget. "Every project should have the option to view the design concept as a mock-up," added Ka Yin Man.



## RESULTS

The new car park, which was due to open in December 2017, is a great example of how architects and contractors can work in partnership with Maple to transform typically dull and utilitarian buildings into an integral and aesthetically appealing part of the urban realm.

With its hexagon-featured golden façade, the car park complements the other elements of the £107m Time Square development that will also include a 4,000 square metre market hall, restaurants, retail units and new council offices.

"The new car park is an integral and important part of the Time Square project as it will underpin and support the whole scheme," said the leader of Warrington Borough Council, Terry O'Neill.

## Architect's ratings

Leach Rhodes Walker described us as 'excellent' after the successful collaboration. "Maple's knowledge and craftsmanship was excellent throughout," said LRW's lead project designer, Ka Yin Man. "From when we spoke to sales about the commercials, to (dealing with) the design and projects teams, the whole experience was collaborative." In a post-project interview, the architects' firm gave us top marks for design services, project support, meeting deadlines and the quality of the finished product. Added Ka Yin: "Maple were always helpful, and any questions were dealt with promptly. Everyone was very knowledgeable and accommodating. The end result was even better than we expected."