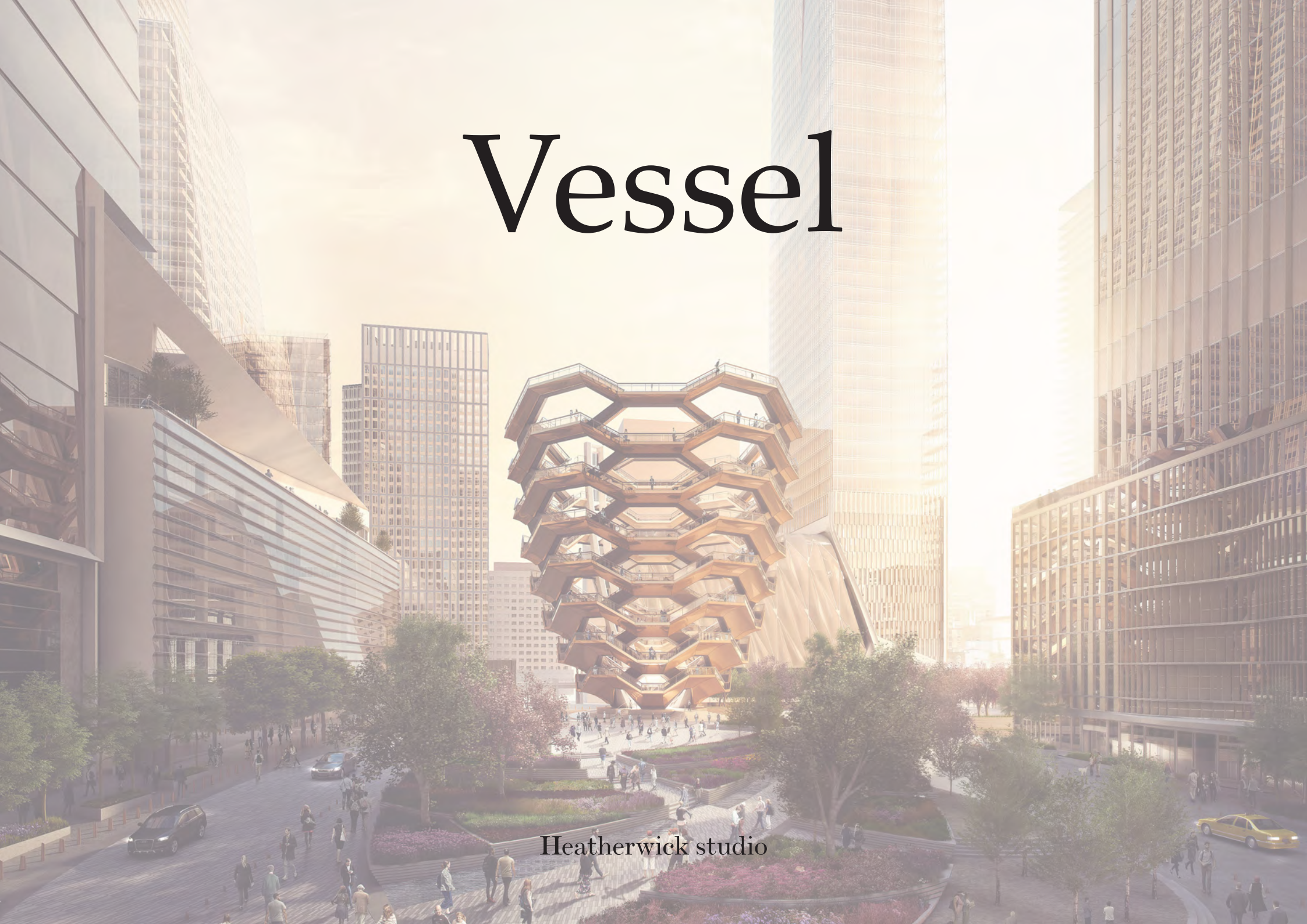


Vessel

Heatherwick studio

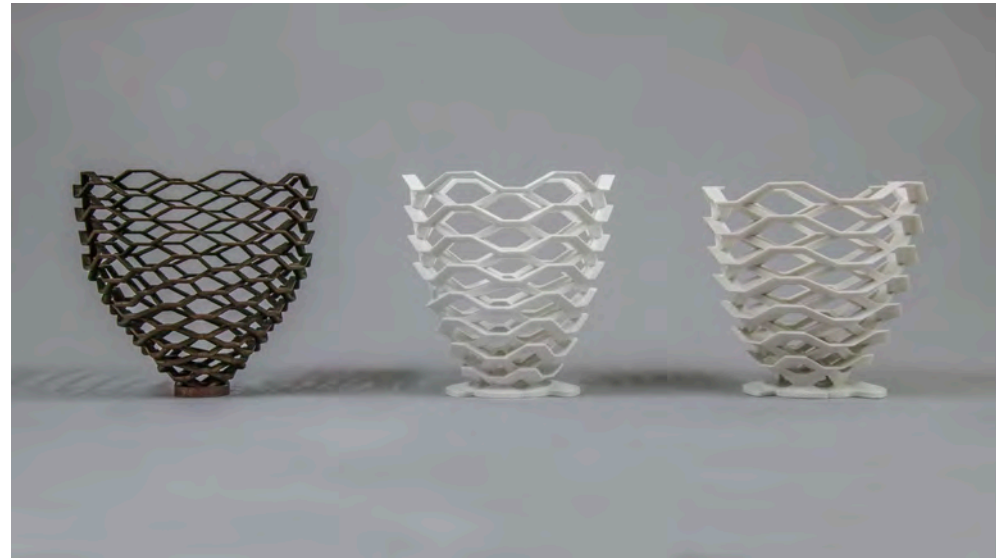


Vessel is a new type of public landmark – a 16-storey circular climbing frame, with 2,465 steps, 80 landings and views across the Hudson River and Manhattan. It is the central feature of the main public square in the Hudson Yards development, one of the largest real estate projects in American history, which is transforming a former rail yard in Manhattan's Upper West Side into a completely new neighbourhood, with more than five acres of new public spaces and gardens.



Heatherwick Studio was asked to design a centrepiece for Hudson Yards, something that would welcome visitors into the heart of the district and create a new place to meet in Manhattan. Part of the challenge was to create something memorable that would not be overwhelmed by the surrounding cluster of towers, or the scale of the new public space above the train platform. Exploring different possibilities, the team started to narrow the parameters: it should be a memorable single object, not a series of objects dispersed throughout the space; rather than an inert, static sculpture, it should be a social encounter, which encourages activity and participation – it should be fun.





Looking at the places in cities where people naturally congregate, the underlying infrastructure is often simple – a staircase, for example, such as the famous Spanish Steps in Rome. Researching this typology further, the studio explored traditional Indian stepwells; these have an intricate network of stone stairs, so that as the water level in the reservoir changes, the surface is still accessible. However, like an amphitheatre, the focus of a well is its centre, and the studio wanted to create an experience that was outward as well as inward-looking.

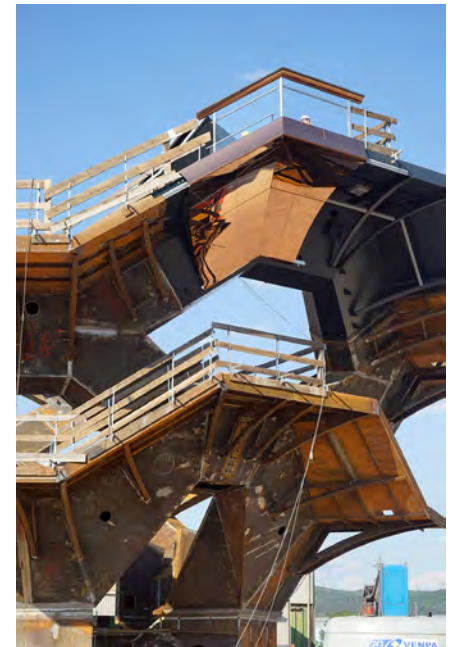
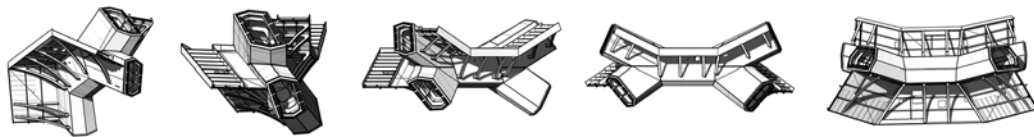








By opening up voids between the steps to create a three-dimensional lattice, the public square could be stretched upwards, creating more than a mile of routes that could be explored in different ways. To create the continuous geometric pattern of the stepwell, with 154 interconnecting flights of stairs, the object had to be self-supporting – a discreet structural solution was required, which did not need additional columns and beams. This was resolved by inserting a steel spine between each pair of staircases, creating a natural division between ‘up’ and ‘down’. The raw welded steel of this structure is exposed to give the object clarity and integrity, and the underside of the staircases is clad in a deep copper-toned metal, setting them apart from the surrounding architecture.



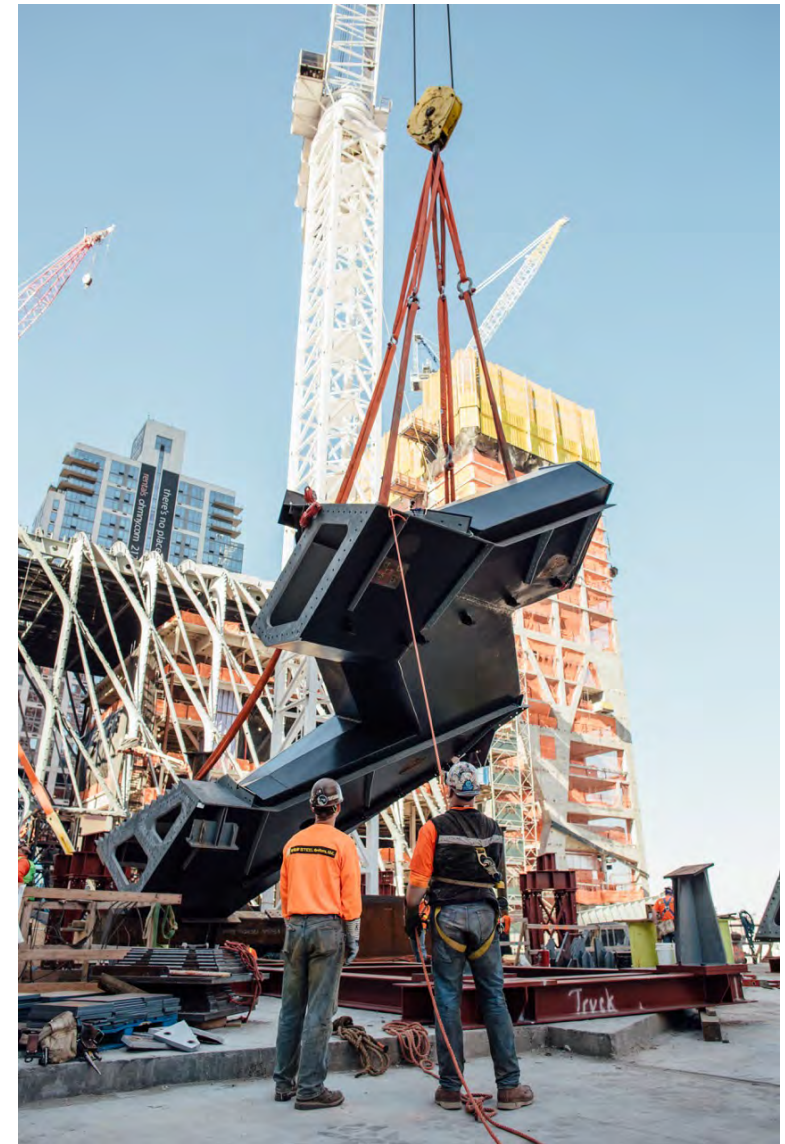


FAVELLE FARM
M7600 USA
SWL 64 TONNES
CO 3742
S/N 1167

NY TOWER CRANE



Every element of the Vessel is bespoke, from the joints to the handrails. The 75 huge steel components were produced in Venice by specialist fabricator Cimolai, before being brought from Italy in six shipments, carried across the Hudson River by barge, and assembled on site in a process that took three years. Yet despite the size of the Vessel, it has been designed at a human scale, to be climbed, explored and enjoyed by New Yorkers and visitors – a simple structure, animated by people and the reflections of the square beneath.





Founder



Thomas Heatherwick

Thomas Heatherwick is a British designer whose prolific and varied work over two decades is characterised by its ingenuity, inventiveness and originality.

Defying the conventional classification of design disciplines, Thomas founded Heatherwick Studio in 1994 to bring the practices of design, architecture and urban planning together in a single workspace.

Thomas leads the design of all Heatherwick Studio projects, working in collaboration with a team of highly-skilled architects, designers, and makers. Thomas' unusual approach applies artistic thinking to the needs of each project, resulting in some of the most acclaimed designs of our time. Following the Gold Award success of the UK Pavilion for the Shanghai World Expo in 2010, Heatherwick Studio has gone on to win exciting design briefs including the Google campus in Silicon Valley, Coal Drops Yard in King's Cross and the overhaul of London Olympia.

The studio has recently completed the 420,000 sqm Bund Finance Centre in Shanghai, a collaboration with Foster + Partners, and Zeitz MOCAA (Museum of Contemporary Art Africa) in Cape Town, the first museum of its kind in South Africa.

Thomas has been appointed a Commander of the Order of the British Empire, a Royal Academician and in 2004, became the youngest Royal Designer for Industry.

Group Leader



Stuart Wood

Stuart Wood joined Heatherwick Studio in 2002 making him the longest serving member of the design and leadership team. With a background in Industrial Design, Stuart has led the broadest range of projects and some of the most iconic for the studio. These include the award-winning UK Pavilion for the 2010 Shanghai World, Transport for London's 1000 New Routemaster bus fleet and the design phases of Google's two new 1 million+ sqft headquarters in California, now in construction.

He has lead projects of all scales and typologies from experimental furniture to strategic city planning. With a clear focus on innovation and technology's impact on future city design, Stuart leads a diverse portfolio of projects around the world including the U.K., United States, Singapore and Europe. These currently include a 1 million sqft new home for Google in King's Cross, London and a new terminal for Changi airport in Singapore (with KPF).

Elsewhere his group is delivering a 110m ice-breaking exploration vessel, and working with Sidewalk labs in Toronto, Canada on a new vision for part of the city built from the internet upwards.

In 2015 the studio created the role of Group Leader to support the growth in scale and number of its projects. Working with Thomas Heatherwick, Group Leaders are responsible for leading all aspects of a portfolio of projects from concept development through to delivery. They are also part of the studio's senior management group, guiding business strategy, planning and process.

Project Leader



Laurence Dudeney

Laurence is currently leading two projects in New York for the Related Properties; 515 West 18th Street, a two-tower residential development that crosses both sides of the High Line, and Vessel, a new landmark for Hudson Yards.

On both of these projects Laurence has had a start-to-finish role as Project Leader, managing multiple teams in differing project stages concurrently. Each presented very different challenges; Vessel required close and careful monitoring of the complex fabrication of its bespoke design, whilst the more commercially-driven 515 West 18th Street required frequent dialogue with the client team and multiple stakeholders.

Past studio projects include the 420,000sqm Bund Financial Centre (a 50/50 collaboration with Foster + Partners) where Laurence was involved in the concept development across the whole site and then detail design focused on the Performing Arts Centre, which has since opened to critical acclaim in 2017.

Laurence was also instrumental in the schematic design and facade development of Sheung Wan Hotel, Hong Kong, and detail design for the Bombay Sapphire Distillery at Laverstoke Mill, Hampshire, which was completed in 2014.

Project Fact Sheet



Press contacts

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Project Name

Vessel

Location

Hudson Yards, New York

Completion date

March 2019

Area / height

2,210 square metres / 45.7 metres

Designed by Heatherwick Studio

Design Director

Thomas Heatherwick

Group Leader

Stuart Wood

Project Leader

Laurence Dudeney

Project team

Charlotte Bovis, Einar Blixhavn, Antoine van Erp, Felipe Escudero, Thomas Farmer, Steven Howson, Jessica In, Nilufer Kocabas, Panagiota Kotsovinou, Barbara Lavickova, Alexander Laing, Elli Liverakou, Pippa Murphy, Luke Plumbley, Ivan Ucros Polley, Daniel Portilla, Jeff Powers, Matthew Pratt, Peter Romvári, Ville Saarikoski, Takashi Tsurumaki

Client

Related, Oxford Properties Group

Design Engineers

AKTII

Structural Engineers

Thornton Tomasetti

Landscape Architects

Nelson Byrd Woltz

Architect of Record

KPF Associates

Steel Contractor

Cimolai

Lift Contractor

Cimolai Technologies

Cladding Contractor

Permasteelisa

Crowd Analysis

ARUP

Lighting Designers

L'Observatoire International

Project Management

Tisham