

Logan International Airport

Boston, USA



Custom metal ceiling system | Photo: Ema Peter

The Project

Terminal E at Logan International Airport in Boston, Massachusetts, has achieved a new dimension of architectural perfection. The redesign of this terminal presents a fusion of innovative design and functional elegance. Two Construction Excellence Awards from CISCA are testament to the company's commitment to excellence, quality and innovation.

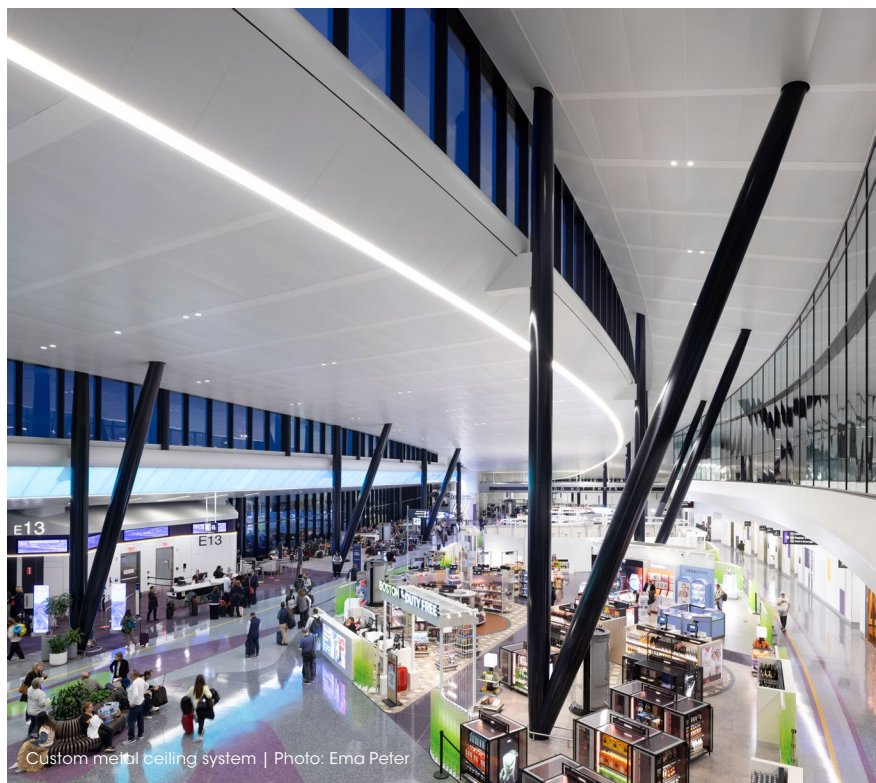
Particular emphasis was placed on intuitive direction finding and clear layout of interior spaces with durlum products also being used to create an unforgettable passenger experience. A central element of this new concept is the breathtaking ceiling design that reflects the underlying architectural vision. Originally planned as a flexible stretch ceiling, it ultimately took the form of an acoustically effective metal ceiling. This ceiling extends across three levels, following the horizontal and vertical rounded forms of the roof, ultimately merging seamlessly at the ends of the terminal. The structural complexity of this ceiling concept is articulated by its curved shape, by the different heights of its bulkheads and by the rounded metal panels that merge harmoniously at the tops of the bulkheads. A proportion of the perforated panels for the bulkheads was designed to permit back-lighting. This metal ceiling comprises more than 2,000 precision-fit components and was designed to enable it to be installed anywhere in the terminal without the need for scaffolding. A technical masterpiece!

Precise modeling of the terminal with BIM played a decisive role in the task of coordinating the various trades involved in its construction. Despite the complex architecture and evolving site conditions on location, it was possible throughout the process to adapt the BIM model continuously.

The outcome is a terminal with a floor area of about 100,000m² that impresses not only in architectural terms but that also satisfies the highest aspirations of the architect in relation to sustainability and convenience.



Perforated steel bulkheads for backlighting | Photo: Ema Peter



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Architects

AECOM
 Luis Vidal + Architects

Completion

August 2023

Products

Rectangular metal panels in a custom ceiling system

1.0 mm steel; various dimensions; powder-coated in RAL 9016; lined with black acoustic fleece; perforated in RG-L15; [approx. 8,000m²]

Bulkheads with rounded top

1.0 mm steel; various dimensions; powder-coated in RAL 9016; perforated in RG-L15

Bulkheads for backlighting

1.0 mm steel; various dimensions; powder-coated in RAL 9016; perforated in RD-L30

Pick-up area: wall cladding as a special solution

1.0 mm steel; various dimensions; various RAL colors

Gate Piers: rectangular metal panels in system S4

1.0 mm steel; various dimensions; powder-coated in RAL 7015; lined with black acoustic fleece; perforated in RD-L30 [approx. 580m²]

Gate Piers: concave DOMUS panels for system S4

1.0 mm steel; various dimensions; powder-coated in RAL 7015; lined with black acoustic fleece; perforated in RD-L30 [approx. 80m²]