McNamara Terminal at the NorthWest World Gateway
Detroit, MI

Located within the Detroit Metropolitan Airport, the McNamara Terminal at the NorthWest World Gateway has transformed the current airport into one of the nation’s premier hubs. The 2.0 million sq. ft. terminal complex is surrounded by six active runways and taxiways. The Terminal Building consists of a terminal, connecting link, east concourse (Concourse A-up to 135’ wide and nearly one mile long), passenger tunnel and west concourse (Concourses B and C).

A steel joist and king post truss system provide support for the 650,000 sq. ft. roof. This framing system creates wide-open, column-free spaces that not only facilitate passenger movement within the building but also enhance the building’s future flexibility. The king post trusses form the lateral-force-resisting system, eliminating the need for bracing and further increasing flexibility of the interior space. The king post truss roof system is continued through the connecting link between the Terminal Building and the East Concourse providing a large open space with a lively mall atmosphere. Steel framed glass walls provide natural light.

Jurors’ Comments
This structural system used to cover such a large open space echoes the long-span train sheds of Europe, such as the Gare de Lyons in Paris.

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JURORS’ COMMENTS

Refreshingly light-weight sensation through the use of ensile elements in combination with natural light. Dynamic roof forms.

STRUCTURAL ENGINEER
Smith Group, Detroit, MI

ARCHITECT
Smith Group, Detroit, MI

STEEL FABRICATOR
Havens Steel Company (AISC member), Kansas City, MO

STEEL ERECTOR
National Riggers & Erectors, Inc. (AISC & NEA members), Plymouth, MI

STEEL DETAILER
Havens Steel Company (AISC member), Kansas City, MO

GENERAL CONTRACTOR
Hunt Construction Group, Romulus, MI

DESIGN SOFTWARE
RAM Structural System, STAAD

DETAILING SOFTWARE
SDS/2, MicroStation, AutoCAD