

THE SEARS CENTRE

Primary Project Team

OWNER:

Madkatstep LLC
Sears, Roebuck Company

ARCHITECT:

Walsh Bishop Inc; Minneapolis, MN
www.walshbishop.com

CIVIL ENGINEERING/ SURVEYOR:

V3 Consultants; Woodridge, IL
www.v3consultants.com

STRUCTURAL CONSULTANT:

Needham & Associates
Overland Park, KS
www.needhamassoc.com

HVAC-PLUMBING CONSULTANT:

Belle Engineering; Elmhurst, IL

ELECTRICAL CONSULTANT:

Hyre Electric; Chicago, IL

GENERAL CONTRACTOR:

Ryan Companies, US Inc.
(Minneapolis, MN)
www.ryancompanies.com

Project Information

FUNCTION-PURPOSE:

- ❖ Arena Facility
- ❖ Concerts and Sporting Events

PROJECT COST:

\$ 50,708,000

Building Cost: \$ 35,030,000

Site Construction: \$ 7,241,000

Soft Cost, etc: \$ 8,437,000

PROJECT SIZE:

240,000 SQ FT./ 4 Levels

CONSTRUCTION

DURATION

315 Total Work Days

Construction Start: 7/15/2005

Project Turnover: 9/18/05

Building Architecture

The Arena consists of (4) levels which contain:

Event/ Mechanical Level

Main Concourses

Bridge Level

Suite Level

Dynamic Features:

40'-2" Glass Curtain wall surrounded by an epoxy aggregate concrete walk

Building Envelope:

1. 26 gauge Type 1,2,3 foam in-place insulated metal panels
2. ACI/PCI Architectural Pre-cast panels

Building Systems

STRUCTURAL SYSTEM

SHORING SYSTEM:

Shoring System integrated with foundation. System uses (100 kip) 55'-0" steel tie-backs @ 15°

FOUNDATION SYSTEM:

24'-0" Foundation Wall

4,000 psi concrete:

Continuous, Strip Footings, Grade Beams, Piers and Column Footings

SUPERSTRUCTURE:

Pre-cast Raker beams & columns, W14 - W30 I-beams
10" hollow core floor planks with 2" concrete topping for elevated floors

HVAC-PLUMBING SYSTEM

HVAC SYSTEM:

Features 240,000 CFM 70/30 VAV system for the arena bowl.

Main supply ducts consist of 66" Ø un-insulated spiral duct, which services 40/20 diffusers
(6) 40,000 CFM Relief Vents are used for the return air system

(2) 10,000 MBH-gas-fired boilers

(2) 600 ton centrifugal chillers

PLUMBING SYSTEM:

(2) 1,500 gal ~ 3,000 GPH

Water Heaters

Triplex Booster pump system

POWER DISTRIBUTION & LIGHTING SYSTEM

POWER DISTRIBUTION:

277/ 480 V 3Ø 4 wire supply
120/ 208 V alternate service
3,000 Amp Building Service
(8) Transformers that provide power distribution for mechanical, electrical and EMS systems are sized for 30 - 500 KVA load

LIGHTING SYSTEM:

- ❖ Fluorescent Lighting
- ❖ 3W LED illuminated hand rail
- ❖ Quartz Flood Lighting
- ❖ Recessed Fluorescent Lighting