



ONLINE

Visit GlassMagazine.com for:

- » **A photo gallery of handling equipment for mirrors**
- » **GlassBuild America products section**
- » **Daily news briefs**

Dodge index: July construction jumps 6 percent

The value of new construction starts advanced 6 percent in July to a seasonally adjusted annual rate of \$578 billion, reported McGraw-Hill Construction, a division of The McGraw-Hill Cos., New York. The July statistics lifted the Dodge Index to 122, with 2000 being the base year at 100, compared to a revised 116 for June.

For the first seven months of 2008, total construction on an unadjusted basis came in at \$337 billion, down 14 percent from a year ago. Excluding residential building, new construction starts in the first seven months of 2008 were up 4 percent.

"The current year has seen wide swings on a month-to-month basis for both nonresidential building and nonbuilding construction, and in July it was nonbuilding's turn to surge ahead," said Robert A. Murray, vice president of economic affairs for McGraw-Hill Construction. "While homebuilding continues to languish, and tighter lending standards are dampening commercial building, there are still project types that are reporting elevated activity to this point in 2008. . . . For nonresidential building, such institutional structure types as schools, dormitories, hospitals, and detention facilities continue to see expansion."

Residential building, at \$182.5 billion, annual rate, grew 2 percent in July, reflecting some strengthening for multifamily projects that offset further weakness for single family housing. ☐

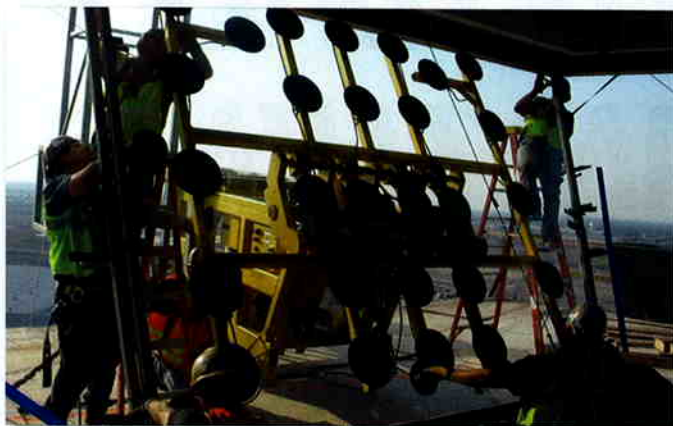
GreatGlazing from great heights

The industry pays a lot of attention to the glass-clad skyscrapers designed by star architects. However, sometimes it's the smaller, unknown projects that have the best glass installation stories. One project in particular caught my eye: the air traffic control tower at Chicago's O'Hare Airport.

At first glance, the 250-foot-tall tower and its windows in the tower cab seem fairly unremarkable, but the exact opposite is actually the case, says Edward Rowan, project manager for glazing contractor Trainor Glass Co., Alsip, Ill.

The tower cab features 10 glass panels, each weighing between 2,000 pounds to 4,200 pounds, and measuring 20 feet by 10 feet. The glass, fabricated by Rochester Insulating Glass, Manchester, N.Y., is 2½-inch thick and three-layer laminated. It's all Diamante annealed from Saint-Gobain, France, with sound-control PVB interlayers from Trosifol, Germany. Trainor Glass custom designed the steel framing encased in aluminum mullions. "The two largest lites on the project were . . . trapezoidal shapes weighing 4,200 pounds each," Rowan says.

The Trainor team faced major challenges developing a plan to hoist the heavy panels 250 feet to the cab and safely install them, Rowan says. "I have never done an install as unique as this," he says. "We set 4,200 pounds of glass, 250 feet in the air with custom rigging, from a tower crane, in the



middle of a wide open field at O'Hare International Airport."

To prepare for the installation, Trainor Glass' entire Illinois Engineered Wall Division brainstormed to develop the best plan. The team finally decided to use a custom C Frame, designed by Wood's Powr-Grip, Laurel, Mont., engineered by Larson Engineering, Chicago, and built locally by Weld-Rite Services, Bedford Park, Ill.

"We knew [the glass] had to be set from the exterior," Rowan says. "With the glass leaning out on a 30 degree angle, and the overhang of the roof, we decided that the C Frame was the only way to go. The C Frame and glass weighed about 17,000 pounds all together. Our crew worked from inside the control tower cab and off of a temporary wood deck that wrapped the exterior of the cab to install the glass. Once you start moving the C Frame and glass, it was not easy to stop. Every movement was carefully thought out and executed slowly and safely."

In addition to height and weight challenges, the team also had to overcome environmental hurdles presented by the Windy City. "Wind was a special consideration during install," Rowan says. "With the glass panels being so large, they created a sail effect while hoisting. A gust of wind could have spun the entire C Frame. We attached tag lines at three different points, forming a triangle to control the glass during hoisting."

The team successfully and safely

completed the installation in a total of five days, with only one day cancelled due to high winds. Walsh Construction, Chicago, was the general contractor. ☐

Have a challenging installation story you'd like to share? E-mail me at kdevlin@glass.org to have your story posted on GlassMagazine.com.

On Aug. 18, the average price of gas in the United States was \$3.74, up \$0.95 from the same time last year. The average price of diesel was \$4.21, up \$1.34 from last year.

—According to the Energy Information Administration

When I'm not writing about glass I ... "play guitar and sing."



Katy Devlin, commercial glass & metals editor