



Construction
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Total station straightens out Vegas installation



Embassy Glass drew upon the benefits of total stations as it undertook one of its most challenging wall system installations ever.

Embassy Glass are specialists at installing unitized curtain wall systems – the skin of a glass and steel building. At the World Market Center (WMC), the Las Vegas-based glazier was recently faced with one of the most challenging installs in recent memory and met the challenge through use of a Topcon Model GTS 235W total station.

With its first foray into the use of such technology, the company discovered the unit brought impressive levels of efficiency and accuracy, and streamlined what seemed a near-impossible process.

The WMC in downtown Las Vegas will eventually be a five structure complex and offer 12 million square feet of upscale home and contract furnishing showrooms and exposition area. According to Steve Pattillo, Embassy Glass' general foreman, Building "C" features an extremely angular exterior design.

"There are exterior sections of this building in which absolutely nothing is perpendicular. We had to establish more than 4,000 control points to work off during the installation process and the fact that there are so many

Company: Embassy Glass

Location: Las Vegas, NV

Project: World Market Center

Location: Las Vegas, NV

Scope: Glazier firm had to shoot more than 4,000 challenging control points as part of a wall system installation.

Topcon Products:

Topcon GTS-235W Total Station
Topcon FC-200 wireless controller

Topcon Dealer:

Nevada Transit & Laser
Las Vegas, NV
www.rmtlaser.com

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AT WORK

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'[Getting points with] the total station is easily ten times faster than shooting it by hand.

– Steve Pattillo, Embassy Glass, general foreman



Using a GTS-235W total station simplified the once time-consuming process of establishing control points for Embassy Glass. Field foreman Ché Hecker shot 11 floors in a matter of days using the total station.

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different angles to deal with made the job unbelievably complex. To add to the challenge, the wall system – more than 1,100 panels – was manufactured in China, so returning any component because it didn't fit was not an option. We needed to nail down those points, identify any potential problems and make the needed adjustments."

In the past, Embassy's crew would have done so using lasers, a plumb bob and a string line – an imposing task, by anyone's standards. Pattillo suggested an alternative approach.

"I knew the benefits a total station could bring to our business, so I lobbied hard with our owners to purchase one. We talked to the people at Nevada Transit & Laser here in Vegas, purchased a Topcon GTS-235W and a Topcon FC200 wireless controller, got enough training on the unit to get us up and running and immediately put it to work."

Pattillo says the once cumbersome, time-consuming process of establishing control points was greatly simplified. "Now it's simply one

person with the total station looking towards another worker holding a prism pole, making the shot and recording the point into a data collector. Ché Hecker, a field foreman and I, shot 11 floors in a matter of four or five days. Normally, that many shots would involve a full crew of six or better working a couple of weeks. The total station is easily ten times faster than shooting it by hand and we are getting points accurate to within 1/32 of an inch."

He adds that Embassy's team benefited greatly from the support they received from Mike Riley at Nevada Transit & Laser, the local Topcon dealer.

"This was a big switch for us and Mike was outstanding in getting us up and running with the Topcon unit. We are very excited about the new technology. For us, using a total station has gone from another possible way to do a job, to THE way to do it. Simple as that!"

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Topcon's GTS-230W Series

Topcon's GTS-230W Series are the World's First electronic total stations to feature wireless operation!



Topcon's GTS-230W Series are the World's First electronic total stations to feature wireless operation! Each model in this versatile lineup can handle all surveying and construction total station needs at a remarkably low price. Four levels of angular accuracy are available to suit any application. And the rugged, waterproof/dustproof design, (IP-66), will stand up to the harshest construction site environment.