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Making Progress...One Step at a Time

The Northwest Addition is beginning to take shape. Check out the interesting facts below that in the future, will help you get from point A to point B – the elevators and stairwells.

The Stairwells & Elevator Shafts

- The north and west stairwells are complete
- Elevator shaft pouring is in process
- The final stairwell height will be 64 feet (each floor will be 16 feet high)
- It takes 32 days to construct each stairwell and elevator shaft
- Total steps to the top of the new building: 80 steps
- Thickness of both stairwell and elevator shafts: 12 inches
- Cubic yards of concrete to build both stairwells and elevator shafts: 750 cubic yards

Efficiency at Work

Both the stairwells and elevator shafts are being constructed with “slip-forms,” which makes construction much more efficient. Instead of having to construct and take down platforms for every pour, slip forms clamp at a certain height. After concrete is poured and hardened, the clamps are released and raised by the cranes to the next pouring level (every 16 feet).

These “slip-forms” cut construction time for the elevator shafts and stairwell by 50 percent!

The Answer is Blowing in the Wind

The elevator and stairwell shaft thickness is actually determined through a complex program which looks at wind shear, or simply stated, the amount of wind a building’s surface area can manage. The wind shear for the entire building helps to determine the number of stairwells, elevator shafts and thickness for each. This is important because these large concrete structures serve as the anchor points from which the rest of the building is constructed.

To learn more about this project, visit monroeclinic.org and click on the expansion button.