

Consider All Your Structural Options: Pan Slab Construction May Surprise You

Are you taking all options into account? Don't overlook pan slab construction. The method has evolved dramatically over the years, producing cost-effective solutions for structures with high live load and long span requirements. Buildings such as hospitals, laboratories and offices are reaping the benefits of modern pan slab construction.

Plan slab construction has evolved. Many can remember when 30" wide pans with 6" joists were the standards. But today, designers utilize larger, more efficient pan voids. Reusable steel pan forms allow cost-effective, long-span structural concrete design solutions with today's advancements.

WHAT

Ceco has built dozens of pan slab-designed building each year, for years. Steel pans have evolved and remain a structural – not architectural – solution. (Although soffit areas can be exposed.) Steel pans are now wider (53", 66", even up to 112"), and their depths remain the same (16", 20" & 24"). Joist widths start at 6" but are often wider depending on the reinforcing needs. Both joists and beams can be reinforced with either rebar or post-tensioning (PT). Individual pans reaching 20 to 30 feet long are utilized to enhance productivity and reduce cost. Joist spans of 30 to 60 feet are not uncommon with live loads of 50 to 100 PSF.



WHY

There are many advantages for project owners and overall project value.

- Utilizing existing formwork materials reduces project cost.
- Longer structural spans and higher design loads are realized.
- Lower floor-to-floor heights than structural steel, reducing the costs of perimeter glazing and other skin materials.
- Less building volume for heating and cooling.
- Allows for easy integration of mechanical and electrical systems.
- Highly fire rated without additional cost of fire retardant.
- Enhanced comfort from reduced vibrations, deflections and even sound.
- Accommodates penetrations and future repurposing, as all PT is easily located.
- Sustainable, with a long lifecycle and reduced life-cycle costs.
- Utilizes local materials and workforce that benefits the local community.
- Shorter lead time to start. Other trades start sooner, too, for faster completion.

Many of these advantages enhance the tenant's value and the building's marketability.

Ceco has decades of pan slab experience. Involve us early in your project to maximize your benefit from pan slab construction. Consider a design/build solution from Ceco.

To learn more about Ceco's value to your project and locate your nearest Ceco team, visit www.cecoconcrete.com.