

Applications of Precast Concrete Slabs

[Home](#) / [Applications of Precast Concrete Slabs](#)

By: Laura Martin | Posted: October 20th, 2022 | Last Updated: October 31st, 2024

Categories: [Blog](#), [Precast](#)

APPLICATIONS OF PRECAST CONCRETE SLABS

A primary benefit of precast concrete is that it saves significant time on a project because it arrives on-site already cast, cured and ready to install. Production of precast concrete involves pouring the concrete into a pre-made mold with pre-stress strands or rebar or both as the primary reinforcement and then allowing it to cure. Once it cures or hardens to a specified strength, it can then ship to the job site, where it can function in various applications.

Precast Concrete Slab Uses and Applications

Solid slabs are one of many types of precast concrete products. Slabs can be designed at many different thicknesses to meet span and loading requirements and come in a broad range of lengths and widths to meet a project's specific needs. Because our slabs are solid and durable, they are ideal for applications that see continuous wear and tear from extreme weather and high levels of pedestrian or vehicle traffic.

Nitterhouse Concrete Products offers pre-stressed and conventionally reinforced precast concrete slabs in multiple design types, including balcony, stair-landing and floor slabs.

Some of the most common applications for these slabs include:

- Building floors and roofs
- Balconies
- Parking garages and miscellaneous structures
- Vehicle bridges

SEARCH

[SEARCH](#)

DOWNLOAD POST PDF

[DOWNLOAD](#)

POPULAR POSTS

- [Precast Concrete Sustainability](#)
- [NiCore™ Plank Longitudinal Joint Shear](#)
- [Seismic & Wind Loading for Parking Structures – Shear Wall Design Considerations](#)
- [Applications of Precast Concrete Slabs](#)
- [Expansion \(Isolation\) Joint Determination in Parking Structures](#)

ARCHIVES



CATEGORIES

- [Blog](#)
- [History](#)
- [Precast](#)
- [Sustainability](#)

- Pedestrian bridges
- Tunnel covers
- Elevated walkways
- Stair landings

Why Use Precast Concrete Slabs in Building Structures?

In addition to strength and durability, two other significant reasons precast concrete slabs work well for building applications are their fire-resistant and sound-attenuating characteristics. Because these slabs are significantly more dense than many other concrete options, they are perfect for buildings in noisy communities or near a highway. Other valuable characteristics of precast concrete slabs include the following:

- Energy-efficient via thermal mass
- Superior weather resistance
- Fire compartmentalizing
- Design flexibility and adaptive reuse

Building Types That Use Concrete Slabs

Builders use precast concrete for many building types thanks to its durability and other structural benefits. The customization options make it ideal for designers who need flexibility in their structural planning. In addition, because it arrives on-site ready to install, it saves a significant amount of time over concrete options cast on the job site, translating to quicker project completion and less risk exposure for the on-site workers.

Types of buildings that benefit from precast slab usage include:

- Office buildings
- Homes and apartment complexes
- Retail shopping outlets
- Stadiums
- Hospitals and medical centers
- Schools

Contact Nitterhouse Concrete Products About Precast Concrete Slabs Today

At Nitterhouse Concrete Products, we're committed to providing the highest quality products while offering customization options to meet your application's unique needs. Our superior customer service and elite technical expertise allow us to stand out from the competition. We produce precast concrete year-round and offer fast shipping. Choose with confidence and make Nitterhouse your single source for precast concrete – what you need when you need it.

Contact us online today or call 717-267-4505 to learn more or request additional information.



QUICK LINKS:

OUR STORY
PRECAST CONCRETE


FIND US AT:

2655 Molly Pitcher Hwy |
Chambersburg, PA 17202





PRODUCTS
OUR PROJECT GALLERY
TECHNICAL INFORMATION
LIBRARY
AWARDS
CAREERS
CONTACT US

 (p) 717-267-4505
(f) 717-267-4518

[BACK TO TOP ↑](#)

