

## Stein Service & Supply's Full Permitting Guide

Getting your warehouse permitted correctly is time consuming and can be stressful. This permitting guide will help answer some commonly heard questions. The guide will go through figuring out if you need a permit, [what you need to apply for one](#), and the [general timeline of the process](#).

### Part 1: High Piled Storage: Do You Need a Permit?

If you are planning on having any pallet racking systems installed in your warehouse, you probably need a permit. Most city building codes require getting a permit when you are storing inventory a certain height or higher, and/or you have combustible storage (this includes the packaging, the pallet, and the items). Depending on your location, however, this permitting process can vary greatly.

One thing you definitely have to do before installing anything in your warehouse is have the place inspected. If you first implement your pallet rack system and then get the inspection to obtain a permit, you run the risk of having to tear everything down and start again. A professional will be able to tell you what kind of rack you need and if you need anything special depending on the building and the area's requirements, which could potentially save you a lot of time and money.

Although it may seem daunting to undertake at first, if you are working with a competent rack or material handling dealer (like us), they can take care of the whole process for you. They would come out first to survey your facility and review your plans to be sure that everything will stay on schedule. The process can take anywhere from a couple of weeks to a few months, so it is best to get started early so you can deal with any surprises and don't fall behind.

If your facility is in a zone with a high potential for seismic activity, you should expect the cost and process of obtaining a High Piled Combustible Storage permit to intensify, which makes sense. A warehouse whose racking has the potential to be in an earthquake must be able to withstand it without collapsing and endangering others.

You can find the exact requirements of your city or county online in most cases to find out what you'll need to start the permitting process.



## Part 2: What Do I Need to Apply For a High Piled Storage Permit?

Applying for a pallet racking permit (high piled storage) can be long and complicated, and varies from municipality to municipality. This part will go through the items that you need in order to successfully apply.

There are often many steps to be taken when requesting a permit. Different documents are required, as well as drawings, site visits, calculations, and more. All of these need to be approved by the city or county that your facility is in, and by both the Fire Department and the Building Department. In addition to having your pallet racking plan approved, your building must be approved as well, and must have all of the appropriate safety features, such as an up to date sprinkler system, safety lighting, and fire exits, to name a few. If the construction cost gets greater than a certain amount, you need to have a General Contractors license, or be working with a company that does.

While in some counties you just need to submit the application, structural drawings, and seismic calculations, in others there is much more required. Here is an example of everything you would need to obtain a permit in Mecklenburg County, North Carolina, where we are located:

- Full sealed plans submitted, which includes
  - Permit Application
  - Building Code Summary (Appendix B) filled out for your facility and system
  - List of commodities and how they are stored
  - Sprinkler Drawings
  - Hydraulic Design Criteria
  - Drawings showing anchors with details and/or calculations
  - Egress/floor plans showing racking layout, exits, and directional signage

| COLUMN  |  | BEAM @ Level 1   | CONNECTOR @ Level 1   |
|---|--|--|---|
| OK  |  | OK   | OK  |
| 3 X 3 X 14GA (70)<br>Steel = 55000 psi<br>Stress = 70%  |  | 4 X 2.75 X 15GA (40E)<br>Steel = 55000 psi<br>Max Static Capacity = 4890 lb.<br>Stress = 97% | Three Pin Connector<br>Stress = 71%   |
| COLUMN BACKER<br>None   |  | BEAM @ Level 2<br>None   | CONNECTOR @ Level 2<br>None   |
| BRACING<br>HORIZONTAL<br>1 1/2 X 1 1/4 X 16GA LC<br>Stress = 7%   |  | DIAGONAL<br>1 1/2 X 1 1/4 X 16GA LC<br>Stress = 45%  | BASE PLATE<br>7.75 in X 5 in X 0.375 in<br>Steel = 60000 psi<br>Base = 0 in. lb.<br>Stress = 41%  |
| SLAB & SOIL<br>Slab = 6" X 2500 psi<br>Soil Bearing Pressure = 10000 psf<br>Slab Puncture Stress = 23%<br>Slab Bending Stress = 46% |  | OK   | ANCHORS<br>Powers Power Stud+ SD1 ESR-2818<br>Pullout Capacity = 1116 lbs. Shear Capacity = 1205 lbs.<br>0.5" X 2.5" Min Embed.<br>No. Of Anchors = 1 per Base Plate<br>Anchor Stress = 15% |

Once all of these items are accounted for and approved, you will be issued your high piled storage permit. Be sure you check your city or county's website for the exact requirements in your area.

### **Part 3: How Long Will It Take To Get A Permit for My Pallet Rack?**

In this part, I will delve into the process and timeline of getting your pallet rack permitted. Remember, this process will vary depending on the city or municipality that your warehouse is in.

The first step in the journey is a customer contacting us to take care of the permit for them when they buy pallet rack. We will then go to their jobsite with a coordinator, and check out the conditions of the warehouse, talk to them about their plans for the layout of the system, and make sure they have the necessary equipment. The building needs to have emergency lights, signage, and sprinklers to start with. Then, we will apply for a permit review date which usually is 3-4 weeks in the future.

During the waiting period for the permit review date, we gather all of the documents we need. We will enlist the help of appropriate design professionals, which will likely include structural and electrical engineers, as well as an architect or CAD designer. These professionals will prepare the necessary construction documents and drawings. After the documents are complete, we review them with the customer to see if anything other construction work would be required in their warehouse. In some instances, they may need to add an exit door or stairway, add emergency lighting, or add exit signage in order for the permit to be approved and a Certificate of Occupancy issued.

A few days before the review date, we will submit the permit application with all the drawings and documents that they need. On the review date, a city official will review everything in the application. They might ask us some questions or to explain certain things. If everything is approved, a few days later the permit can be picked up. We then print out the drawings and take them and the permit to the job site, where they can start construction.

Once the construction is complete, we can request a building and fire inspection, and in some cases other inspections, like electrical. When the inspections are passed, the Certificate of Occupancy is issued and the customer can begin operations with their pallet rack and warehouse.

The entire process can take up to a month or more, but, again, varies depending on where you are located and how strict the local laws are. Check your local government's website to see what is required specifically where your warehouse is located.

Contact us if you have permitting questions or need help getting your pallet racking and warehouse permitted.