## **How to Manage Construction Submittals**

The construction industry is a growing economy. From thousands of projects each year to the millions of investments per capita by businessmen, there's no denying that the boost in the market is evident everywhere. In this industry, construction business strategies coupled with a capable project management team are a sure win for the construction company, in the sense that it gets recognition for efficiency and reliability in the field of work. The creation of high-rises, condominiums, and commercial buildings entail many decisions and compromises. Between the client and the construction company, a lot of dealings and contracts passed under their supervision. The two parties have to work hand in hand to achieve the goal of producing world-class and excellent structures.

There are several things that construction companies and owners have to discuss when finishing the processes of a project. Aside from the usual <u>business plan</u>, marketing strategies, and schedules, there's one material that's often overlooked by many. These are construction submittals. Construction submittals may seem small, but their use is critical for the project. This article will discuss the tool's necessary information and the power it yields. Read through and learn more about the processes of construction submittals.

## What is Construction Submittal?

Before the finality of decisions in the planning process of a construction plan, the general contractor, subcontractor, and designer present their submittal to the owner of the project. Submittals are documents that contain the clarified and specified construction drawings, data from the construction site, sample designs, and other materials that are relevant to the project. As a requirement, construction submittals help in determining the final specifications of the project, ensuring that there are opportunities for subcontractors, architects, interior designers, and engineers.

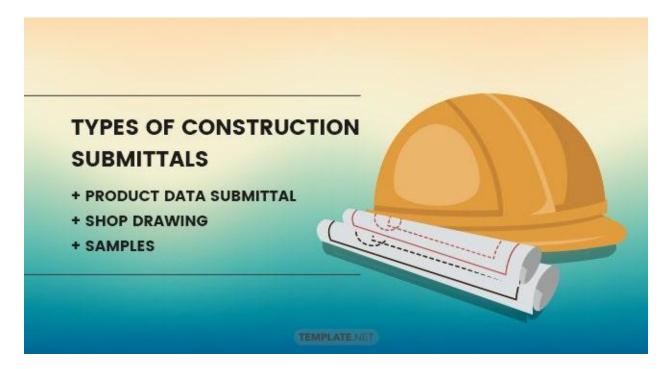
Although some submitted ideas and parts can have different revisions, it still depends on the final decisions of other people involved in the project. The engineer and contractor contract enables both parties to make changes when deemed necessary for the convenience of the construction procedures. Moreover, the submittal documents have the essential information essential in deciding the materials to use, the timeframe to follow, and schedules to observe for the project. With the building <u>construction</u> <u>contract</u> approved and signed by all groups involved, the proceedings to the construction of the structure start.

# **History of Submittals**

Though only coined in the last century, the concept of construction submittals has been around for many years. When a new building is about to rise, the engineers make measurements and list down the materials to use. The architect and interior designers work hand in hand in filling out details for the building to fit the needs of the people and to meet the demands of the owner. However, do note that the processes of the modern construction remittal processes are more rigid than before.

After the collapse of the suspended walkways in the Hyatt Regency Hotel on July 17, 1981, construction submittals were taken more seriously. The cause of the tragic accident, which resulted in the death of 114 people, was the alternative design approved by the engineers without double-checking the details of the proposal. The substituted steel tie rods had shorter lengths than the supposed predetermined sizes. An investigation happened, and the state judge found the engineers guilty of gross negligence. In total, settlements for the victims amounted to \$63million. Today, people involved in projects have the responsibility of certifying that details and data in the submittals are foolproof and accurate.

# **Types of Construction Submittals**



Unlike what most people presume, construction submittals come in three different forms. The purpose and content of each type vary from the other. When approved, the design-builder and contractor can thoroughly discuss the contents of the submittals and then create the material contract to use for the project. Construction submittals are essential when formulating the work contract for the people involved in the project. The <u>schedules of some activities</u> in the construction site are also possible when the project heads accept the construction submissions submitted by subcontractors, architects, and other contractors.

In some opportunities, those who design the construction submittals can look at <u>construction brochures</u> to find inspiration for their work. This instance often happens when some projects are too complicated for planners. Nevertheless, the creators of the plans can find some ideas using other materials. Going back, here are three primary types of construction submittals that construction companies use when formulating the project plans.

#### **Product Data Submittal**

The sole focus of product data submission is providing the building materials' information. The document includes the dimensions and specifications for the flooring, model of the steel bars and woods to use, the quantity of the materials, and the desired manufacturers. Sometimes, warranty details of the elements are also in the submittal. Through this document, the reviewers of the submittals can check the authenticity and durability of the materials. After all, these resources should withstand the various outside forces in the location site.

## **Shop Drawing**

Shop drawing provides in-depth detail on the processes in assembling particular parts, spaces, and areas found in the project area. The data on the submittal or the blueprint has step by step instructions together with the illustrated materials' measurements that come together to form the components needed in the building. Shop drawing has illustrations in the form of drawings to visualize the subject better. Since shop drawing covers diagrams and data specifications for the work, it has several notes and statistics.

## Sample

In this submittal process, the physical aspect of the products is the primary focus of the contractors, subcontractors, and planners. For instance, the subcontractor will submit various soil samples to use in the mixture and the brick and rebar to utilize for the establishment. The color patterns and paint swatches are also part of the samples that the contractors will send to the owner or the general contractor. Designers can send in the texture samples and fabrics that they will add when the construction is almost done. Anything related to the elements that make up and complete the project is part of the

sample submittal. Also, writers of the document should mention the suppliers and manufacturers of the materials for the project.

## The Construction Submittal Process



Construction companies follow procedures to ensure fewer errors and inefficiencies. In this industry, making sure that inadequacies are, at a minimum, is crucial to the public. After all, this market is the center of commerce, trade, information dissemination, and transportation. Therefore, it is vital to assure the public that everything is safe. The construction submittal process includes a set of approaches for the convenience of everyone involved in the project. From the architect and engineer to the owner and project manager, the preparations and execution of plans follow a system.

#### **Pre-construction Phase**

During the initial meeting of the people and groups that are part of the project, the project manager has to discuss the submittal process. The <u>preconstruction phase</u> is one of the essential points in the construction project as everyone can get acquainted with the other members of the team. In this meeting, the leaders should clarify the qualifications, technical specifications, and demands of the client. Information sharing in the phase helps avoid delays and possible mistakes.

#### Schedule of Submissions

There are instances when other submittals get presented before others. Since the processes in a construction project don't happen simultaneously, other submittals, especially the outputs for the final products, have different and extended deadlines. However, the ones that are directly involved in the construction of the establishment have schedules. Submittal schedules are necessary to avert setbacks on the proposed completion dates of the project. In that case, design plans and site phase plans are the priority of the project managers and owner.

### **Submittal Preparations**

When the manager sets the schedule dates for the submissions, subcontractors start gathering the data they need to write in their submittal forms and reports. The <u>construction planning</u> process takes up time, so the people who have to present submittals need enough time to get the information. Nevertheless, they have to have accurate measurements and details before handling the submittals over to the reviewers.

## **Reviewing the Submittal**

After the subcontractors' submission, the engineers and architects will discuss the contents. In other times, other engineers and designers also send their submittals to the general contractors. The responsibility of the leaders comes down to making sure that information on the documents is factual and specific. Engineers reviewing the submittals can make inquiries about the details on the paperwork and resend the material for revisions if necessary.

# Why is Construction Submittal Important?

- Every construction company and project owner wants to steer clear of liabilities and problems. Besides formulating <u>risk management plans</u> to determine the possible safety issues in the work area, the company and project manager also create practical strategies for the benefit of everyone. Schedule management plans and performance management plans are also for the convenience of tracking the happenings in the construction site. Indeed, the administration should have numerous ways of keeping everything in order.
- Another way to make sure that the construction project avoids pitfalls, especially
  during the building process of the structure, is through recognizing the
  importance of construction submittals in the planning process. Construction
  submittals have leverage over the decisions that engineers, designers, and
  architects have. Sometimes, through these submittals, these professionals can see
  where errors might occur. As a whole, a construction submittal is a vital tool for
  planners.

# **How to Manage Construction Submittals**

When subcontractors send their submittals to the project heads, they have to wait for further instructions regarding the approval or disapproval of their proposed measurements and materials. On the other hand, contractors who view the submittals have to make sure that they relay their requests and requirements accurately. The contents on the submittals, when accepted by the general contractor, will be part of the site phase plan.

## Have a (Phase) Plan

Like other construction plans that engineers have to consider when making the activity schedule, submittals play a vital role as it provides details on the deliverables for the project. Most planners—engineers, architects, and managers—have a phase plan checklist on hand to have a better understanding of the management of the procedures in the project. Project planners can then observe dependencies of activities because of construction submittals.

#### Streamline the Process with a Software

Creating a construction submittal demands excellent research skills, patience, and, importantly, time. With all the information and gritty details that subcontractors need for the material, the process of gathering everything together takes a long time. But with the introduction of new construction trends that makes the submittal process more manageable, more opportunities are opened not only for subcontractors, but also engineers, architects, and planners. With the latest software available to these professionals, taking note of the details and numbers become more manageable. The importance of technology is evident in proving that with these modern tools, productivity is a hundred times better.

# Risks and Cautions When Working with Construction Submittals

Although not considered as official contracts between parties, construction submittals carry legal responsibilities. Each decision that the subcontractor, contractor, engineer, and architects make when formulating the construction submittal weights the entire project. So here are some risks and cautions that people have to know when making construction submittals for a particular construction project.

• Incorrect labels and measurements can cause problems in the construction of the establishment. With errors like this, the durability of the building is at stake. And

- like the collapse of the walkways, it goes back to the people who gave the wrong calculations and approved the erroneous measures. So, double-checking the contents of the submission is crucial.
- The people involved in the project should uphold the standards given by the company. If the compromise never meets the expected quality score, it may be an issue in the future.
- Through <u>cost analysis</u>, the budget planners can set the budget limits for the project. And using the data in the construction submittals, the planners have a better understanding of the <u>budget allocation</u>. But when the information in the document is inaccurate, sudden change orders and delayed deliveries can affect the budget flow and amount.
- Humans are prone to experiencing failures and mistakes. However, if these
  inaccuracies are in construction submittals, it can be troubling for the people
  involved. To stop this from happening, subcontractors, engineers, designers, and
  architects can use software technology to do the calculations and other necessary
  work.