

Austin's Top Ten Construction Tips

Teamwork and planning ensure construction goes smoothly

The Austin Company's Food and Beverage Group has the experience and knowledge you need to help you realize a successful plant construction project. At The Austin Company, we understand that food plants must be designed and constructed with safety, quality, reliability and cleanliness as the guiding principles.

Here are our **Top 10 Tips for a Successful Food Plant Construction Project:**

1. Experienced food plant construction project team

It is imperative that each member of your project team --from architects to contractors to construction personnel – have specific experience in designing and constructing other facilities that are similar to your plant. Having the construction team on board early so that they can be involved in the design process helps achieve a better balance between capital costs and operating costs.

2. Develop scope as a team

At the onset of the project, develop a project scope that everyone involved signs off on which includes output, expansions, sustainability requirements, owner expectations, individual responsibilities and milestones.

Whether or not LEED certification is a goal, designing for sustainability represents good design and business practices. Environmentally friendly sites and facilities follow the LEED certification guidelines and standards which address a wide range of design features including water efficiency, energy usage, materials of construction, recycling of construction materials and use of recycled materials in construction, indoor environmental quality and design process innovation.

3. Detailed drawings for bids

Make sure that the drawings that your architect and engineer send out for bid have the level of detail needed to give contractors and subcontractors adequate information for cost estimating in order to streamline the bidding process. If the drawings are incomplete, bids will more likely be based on interpreted versus actual data. Each contractor will have his own opinion of what the drawings mean, which will make choosing the right bidder inefficient and ineffective.

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4. Determine site logistics and construction challenges

As was done during initial site location, the pros and cons of a specific site should be analyzed at the beginning of the construction process. Consider how you will get new equipment, materials and workers into the facility. This is important when planning the sequence of construction, minimizing the impact on construction traffic and other businesses on the street, and determining how best to minimize dust and runoff during construction.

If a temporary partition is required for separation, it needs to be cleanable and under negative air pressure so that air flows away from existing processing areas. Outage scheduling is critical for work that can only be performed when production and production systems are empty of product.

5. Detailed construction schedule

If the design and construction team is thought of as an orchestra, then the detailed construction schedule is the music they play by. The schedule will tell you when major purchases need to be made. This will help you understand when critical facility, operational, and process equipment decisions should be finalized in order to keep the project on track. Identify, specify and purchase long lead equipment for both utility and process systems.

6. Professional purchasing for contracting and documentation

Before your RFQ is distributed, pre-qualify potential bidders to determine their depth of experience in food plant construction, their ability to handle the size of the project being proposed, and their reputation for quality work. Bid documents should specify site rules and protocols emphasizing behavior within GMP guidelines, achieving sustainable construction practices, as well as requirements to abide by the safety rules and regulations mandated by OSHA.

7. Quality assurance and control plans

Your contractor should establish a Quality Assurance (QA) Plan to follow all of the way from field inspections and tests to owner validations. Make sure they implement the QA plan with a detailed Quality Control (QC) plan covering all aspects of the construction from soils and concrete testing to utility and process system testing and startup.

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8. Regularly scheduled project update meetings

Communication is critical to the success of your project. Attend regularly scheduled meetings on all levels and document any changes to procedures, schedules, etc. as they are addressed. The project manager should take minutes of the meetings and review them carefully as they become an important part of the project documentation. The contractor should have an effective project communication plan that includes daily meetings with the construction team, superintendent and foreman; bi-weekly meetings with the construction team and subcontractor project managers, and client meetings with the engineering and construction team as often as needed.

9. Cost accounting procedures and tracking

Project cost is a critical element to the success of any project. The cost should be highly predictable from the outset. However, the procedures and tracking of costs can add important value to the project over the long term. One of the advantages of having an experienced team is that they will set up a code of accounts which will support the segregation of costs associated with building and building-related equipment and the capital cost for manufacturing equipment as well as the installation, support and utility requirements associated with it. This is an important consideration when it comes to tax incentives and accelerated depreciation for major elements of the capital investment.

10. Safety and hazardous communication programs

In addition to the required considerations for safety that are a part of any construction project, a comprehensive safety and hazardous substances communication plan - specific to your particular plant and its products - should be incorporated into the existing rules and practices for each project.

Our Capabilities

The Austin Food and Beverage Group provides guidance, expertise and experience in Food Plant Construction which extends well beyond the brief information provided here in our Top Ten list. Should your future plans include upgrading an existing facility or site location and planning for a new facility, please contact us at one of our offices below to find out how we can help you evaluate and improve your bottom-line.

Atlanta:	Bob Graham	404.564.3964
	Sean Barr	404.564.3980
Cleveland:	Tim Smith	440.544.2603
	Eric Bockmuller	440.544.2663
Los Angeles:	Jim Cathcart	949.451.9000
New York:	Greg Carr	908.371.9100