

An Analysis of the Cost Impacts Experienced by Drywall Subcontractors During Covid-19

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Abstract:

Covid-19 has presented issues in many forms for the drywall tenant improvement (TI) industry due to regulations and restrictions instilled in the Bay Area, California. This report details appropriate implementation of force majeure clause in contracts, stay-at-home orders with regard to construction and updated OSHA requirements. It then goes into analysis on cost impacts observed by various drywall companies operating in the Bay Area and how they are created and controlled. This analysis is supported by interviews conducted with representatives from six different drywall subcontractors who are involved in the estimating and bidding process. Interviews consisted of eight open ended questions regarding cost alterations and mitigation due to Covid-19's impact on areas concerning material procurement, jobsite productivity, initial bidding changes and future expectations. Every company has its own way of alleviating costs associated with Covid-19, however, in the TI sector, many smaller costs associated with Covid-19 are being forgiven to keep good relations. The future looks promising for the construction economy as the Covid-19 vaccine may be available in the coming months, however, upcoming tenant improvement designs may evolve as company work structures have changed due to the pandemic.

Key Words: Covid-19, Tenant Improvement, Drywall Subcontractor, Force Majeure, Work Shutdown Cost Impacts, Alternative Bidding Practices

Introduction

Covid-19 has impacted every individual in the country. The San Francisco Bay Area commercial tenant improvement sector is no exception. Many individuals have lost their job, had to work from home or were diagnosed with the Covid-19. Many projects were disrupted completely as the stay-at-home order was issued on March 16, 2020, and it became illegal for a worker or any management to enter any site. This mandate affected essentially every trade in the construction industry. This brings up a large period of grey area with regards to construction and contractual agreements between working parties on a job site in the Bay Area. Covid-19 premiums can be added on by the subcontractor where they deem necessary, however, this grey area made by Covid-19 can result in unethical business practices through vague or hidden costs. In an attempt to understand the process on how Covid-19 costs impacts came to be, there must be research and inquiries done within a specific trade to understand how the subcontractor has been impacted, ultimately affecting the client's

requested product. One extremely pivotal trade that is involved in the tenant improvement sector from beginning to end are drywall companies. They are the backbone of the entire project as they put up the studs, beams, rough-ins and walls required for every other tradesmen to complete their scope of work. Due to their large amount of participation throughout the entirety of the project, it can be easily concluded that drywall subcontractors have conducted many conversations about how costs are handled with regards to an activity that's been changed because of Covid-19 with general contractors and owners.

There are many drywall subcontractor companies in the Bay Area that have completely different cultures and abilities to do certain types of jobs. Some are small business owned that may only do residential jobs whereas there are huge drywall companies that will do jobs ranging from two hundred thousand to eighty-five million dollars. Regardless of the size of the project, Covid-19 will have an impact on some portion of the job, whether it is initial bidding productivity, materials, or labor time. Every company has to respond to these impacts brought on by the pandemic effectively and each company may have its own way of responding. The focus of this research is to pinpoint where drywall subcontractors are seeing increasing costs due to the outbreak and how they are mitigating these costs efficiently to achieve profit while also appeasing the needs of the client. A client, general contractor or landlord can also view these findings to assess whether or not a drywall subcontractor is operating ethically or taking advantage of the Covid-19 grey area.

General Background:

Force Majeure

Since the pandemic of Covid-19 seemed to appear from nowhere, the consideration of an “act of God” or Force Majeure contract trigger comes to mind. In regards to Covid-19, builders and owners must recognize the possible use of the force majeure clause in the agreed contract between each party as it's defined as “a typical legal contract provision that addresses the unpredictable changes that can affect a contract. It can relieve parties from performing their contractual obligations when certain and specific circumstances beyond their control occur, making the contract's performance either inadvisable, commercially impracticable, illegal, or impossible.” (Lai 2020) Based on this definition, diseases and plagues can be categorized in force majeure clauses depending on how the contract is written and what the parties agree upon. If diseases and plagues are included in the clause, then each party can easily identify that coronavirus would fall unto a force majeure event and cost impacts can be taken into consideration accordingly. However, if the force majeure clause in the contract does not state specific inclusion of diseases and plagues then “contractual parties are liable for what they cannot perform even if specific circumstances beyond their control occur” (Lai 2020). Nonetheless, if the company is under a Public Works Contract (PWC) then they can create *ex gratia*, or non-obligated, payments between parties due to the losses incurred by the pandemic as “the payment aims to cover the Contractors' preliminaries unavoidably incurred and reasonably vouched for the duration of the site closure” (Bryson 2020), thus eliminating any questions with regards to Covid-19 inclusion in force majeure clauses.

Stay at Home

The progress of most construction in California was halted by Governor Gavin Newsom, as the coronavirus was becoming more prevalent in the country and states, by issuing a stay-at-home order which took effect on March 19th, 2020 and ended May 4th, 2020. (Larson, 2020) During this period, Newsom allowed some construction activities essential such as “public works construction” and “construction of housing (in particular affordable housing or housing for individuals experiencing homelessness)” as essential. The list also includes “airport operations, water, sewer, gas, electrical, oil refining, roads and highways, public transportation, solid waste collection and removal, internet, and telecommunications systems...” (Budds 2020) This order stunted the construction industry dramatically in the Bay Area depending on each construction company’s specialization. In turn, many construction companies’ and trades’ cash flows were interrupted as they either couldn’t complete their contracted work as sites were closed, costing companies money for unused materials and labor with no owner payments (unless *ex gratia* is applicable), or work was simply not available as owners weren’t interested in paying for any construction that wouldn’t be used for an indefinite period of time. The absence of construction projects that are needed for positive cash flow for a construction company leads to cutbacks and furloughs and some companies might even experience insolvency and bankruptcy.

OSHA Requirements

The Occupational Safety and Health Association (OSHA), has stated that regulations are in direct conjunction with the US Center for Disease and Control (CDC), guidelines and have expressed specific standards, visible on their website, for Covid-19 that should be considered. These standards for construction are seen in 29 CFR 1926 Subpart E which requires gloves, hardhat and vest, face and eye protection as well as respiratory devices when needed. This is extremely applicable during Covid-19, “When respirators are necessary to protect workers, employers must implement a comprehensive respiratory protection program in accordance with the Respiratory Protection standard (29 CFR 1910.134).” Contractors are also advised to follow mandated social distancing of six feet and, in the Bay Area, to use questionnaires asking about Coronavirus symptoms and if an individual was near someone with Coronavirus in compliance with The General Duty Clause, Section 5(a)(1) of the Occupational Safety and Health (OSH) Act of 1970, 29 USC 654(a)(1), which requires employers to furnish to each worker "employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm." It is important to recognize these standards as fines can be hefty and could be a detriment to a company’s cash flow and reputation.

Methodology

Interviews were used as the process to gain real-time insight and information with regards to the cost impacts to drywall subcontractors for compliance to Covid-19 requirements and guidelines. After researching how Covid-19 is affecting costs in the general construction industry, professionals specific to the drywall industry were identified with the help of Jason Rianda at Skyline Construction.

These contacts work closely in various cost control aspects such as creating estimates, bids, proposals, change orders and project management. They enabled analysis on each facet of the construction process where costs are impacted from Covid-19. These individuals work with industry-leading drywall subcontractor companies like Daley's Drywall, Creative Ceilings and Drywall, Stockham Drywall, Magnum Drywall, Pacific Drywall and Premium Drywall. The research scope consisted of open-ended interview questions specific to additional costs that have been incurred for drywall companies and companies are handling cost changes during a pandemic. Invites for interviewees were then sent out over email for a recorded Zoom meeting. Each interviewee received an objective statement and were asked the following open-ended questions as explained below.

The following questions relate to the drywall costs that have increased during Covid-19 and attempts to analyze the method of bidding for new projects in this unique climate. It also takes an in-depth look at which work situations and specific line items are affected when bidding with respect to a drywall subcontractor. The information gathered will allow insight into project costs that both owners and subcontractors can review to ensure they are bidding accordingly as well as correctly adjusting time and cost to account for impacts that stem from Covid-19. With this information, subcontractors may see that they need to add premiums as well as consider how premiums might be higher or lower than anticipated given the existence of different variables.

1. With a 30,000 SF project as a baseline project, what were average costs like before the pandemic in terms of drywall per sf for commercial buildings in the Bay Area?
2. Have costs included in subcontractor proposals increased or decreased during the pandemic? What items are included in those increased or decreased costs?
3. How has this pandemic increased or decreased the number of CO's during the pandemic? And how will the company respond to reduce CO's?
4. Have you seen productivity go down during the pandemic? Has this affected the way you go about the bidding and proposal process?
5. How have bid walks been affected? Some owners have been strict on how many people can look at the site and at what time they can come out. Has this affected your timeline on creating a bid quickly with accuracy?
6. Since there's no occupants scheduled to come in (due to Covid), do you expect higher priced bids as the owner expectations are higher now? Or will they be the same?
7. If someone catches Covid on the job, do you have a specific line item cost that covers this possibility when the bid goes out? Is there an allowance to make up for that?
8. What do you think future bidding will be like until the industry goes back to normal? Have owners been asking for new jobs or repairs? Has your company made a specialized estimate/bid template for bidding in this climate for owners and GC's?

The following interviewees who wish to remain anonymous and their companies are:

- Interviewee A- Daley's Drywall
- Interviewee B - Creative Ceilings and Drywall
- Interviewee C - Stockham Drywall
- Interviewee D - Magnum Drywall
- Interviewee E - Pacific Drywall

- Interviewee F - Premium Drywall

Interview Analysis

A major issue where each interviewee has agreed is the decreased productivity that has resulted from the pandemic, specifically with regards to CDC and OSHA regulations. Many of the drywall companies agreed that some owners are relaxed on how they approach regulations and guidelines, however, all owners have a basic Covid Containment plan when allowing workers into their space. Interviewee B from Creative Ceilings and Drywall expresses this factor greatly as he mentions “that the Covid Questionnaire sheets alone take almost a half hour to complete and get approval from the superintendent to gain access onsite. The regulations continue to be a problem even after answering the Covid questionnaire as elevators in every Bay Area site are limited to a certain number of people. This creates productivity issues as it can take additional thirty minutes of labor to just get every worker on the same floor to start their work.” It can take even longer depending on how many elevators are open for use and the amount of workers allowed in one elevator according to interviewee E, “If the owner is strict and only wants two people at a time in the elevator and there’s only one elevator available with a thirty man crew onsite, then it will take fifteen trips in the elevator just to get workers where they need to be. When one loses 30-45 minutes of labor hours every day for a job that lasts for three months, the cost impacts are pretty substantial at the end of the job.” The Productivity Comparison figure below shows the lost productivity on a typical 6-month job. Following Covid guidelines results in a 10% decrease in productivity which means that a job will take an additional 103 hours or 13 days based on 173.3 hours in a work-month (2080 hours per year). See below for figure 1 that depicts the productivity loss.

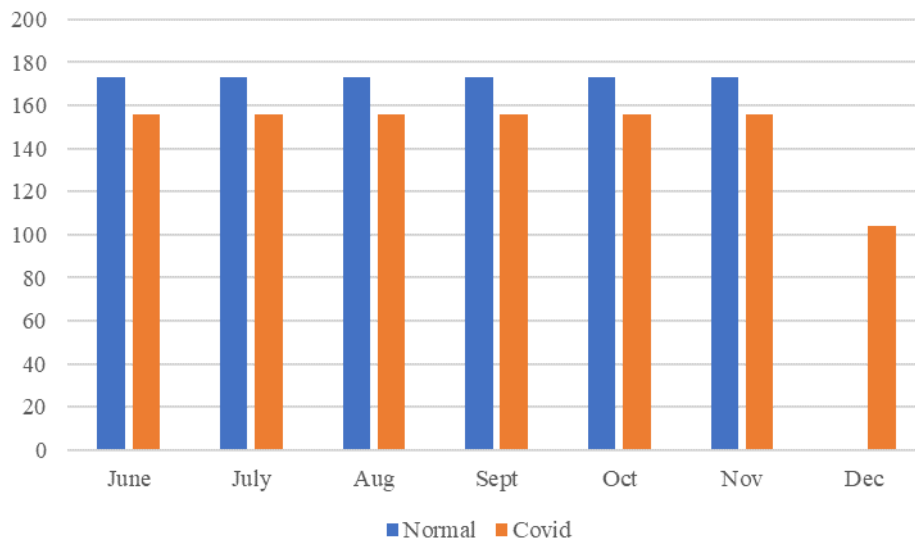


Figure.1 Productivity Comparison

Interviewee A adds that the subject of productivity is a very loaded question as “we used to say that we hated sub stacking. We used to say there’s too many people around us and subs are getting in each other’s way and that’s why productivity is low.” Trade stacking is a very popular technique that is used by general contractors as projects are rushing to be completed at the proposed end date so a profit can be made quickly. This sometimes includes having as many trades work on the site at one time to expedite construction to meet timelines, especially when there is a setback in a project’s schedule. While trade stacking can be useful, having too many trades in an area at one time can actually be counterproductive and a detriment to the project’s timeline if the general contractor isn’t aware of the type of work that is necessary for each subcontractor’s scope. Trade stacking can be successfully accomplished if the contractor company coordinates with each sub correctly, so the correct sequence of events is achieved. Nonetheless, trade stacking is not an option during Covid-19 and this has created another set of issues for drywall subcontractors. Now drywall subcontractors' main reason for lack of productivity is they have to be a certain distance away from each other when putting up walls, something that is almost impossible to do efficiently as it’s a multi-person job. “It all depends on the county and general contractor on how strict they are with regards to the pandemic... if social distancing is strict, then a solution needs to be made with handling drywall because I’m not letting one of my guys carry a twelve foot sheet of drywall and throw his back out... if a GC isn’t familiar with drywall work on the tenant improvement or commercial side, then it will take hours from management to come to a solid solution on getting our work done along with following their standards.”(Interviewee D) Owners have the ultimate decision on how they want work to be done in their space and that includes how they wish to deal with Covid-19 and their protocols for the building.

Most of the basic protocols are manageable for subs, but there are times where some owners have guidelines that inhibit the work of trades. This is where management needs to step in on the general contractor and subcontractor sides to educate the owner on what type of needs and changes may need to occur for drywall trades to complete their scope of work. The owner always has the right to keep their protocols to the standards they believe to be sufficient, however, it is part of ethical business practices to keep the owner informed on what costs will be incurred due to strict Covid-19 standards.

This is where the cost impacts can affect the owner as if they wish for the building to be completed by a “drop dead” date. Overtime (OT) tags are created as time lost during the week has to be made up over the weekend to reach the client’s due date. The OT rates are generally much higher depending on how many crewmen are needed and for how long. Owners will ultimately have to approve change orders given by the general contractor from the subcontractors if they want the building to be done on time or else they will have to settle for an expanded timeline. Cost impacts will also be seen if the project was started before shelter-in-place went into effect. Any job that started before Covid and was expected to finish during the shelter-in-place period will have costs associated with the delay as management did not expect closures nationwide. Interviewee C explains how they handled this issue “... what we are going to do is get with the clients and talk about the delay that is going to occur, especially when it comes to labor rates increases, and how it will push the job out from fiscal year 2019 to fiscal year 2020 and the job was supposed to be complete in 2019, we need to address how the increase will be handled... however, we’ve forgiven a lot of those costs to keep a strong relationship with the client.” In this case, technically the general contractor and owner do not have to

pay Interviewee C if the pandemic wasn't specifically stated in the force majeure clause in the contract between the parties. While these aren't public projects, a form of *ex gratia* payments was agreed upon between each party for substantial costs that were a result of the coronavirus pandemic. While it's easy to say for future projects just to adjust the bid so it includes the reduced hours, it's been expressed by every company that this is not the case as Bay Area drywall bid proposals have been "flattened" out meaning that almost every drywall bid is around the same price due to hard bidding, making this environment for drywall companies extremely competitive. If bids were to include the cost impact from less productivity, then they will not be awarded the contract as GC's will be looking for a lower or more manageable price. Nonetheless, the companies interviewed have been in the industry for a long time and have made strong relationships with GC's so they are confident that no matter what the bid price looks like, that the relationship with the GC will allow subs to have that continuous supply of work. According to interviewee A from Daley's Drywall "the subs that will be affected the most due to Covid-19 are smaller companies that are still trying to make a name for themselves as well as companies that do not have a strong returning customer base. These companies are the most likely to go under." Interviewee A goes on to say that "In terms of our company (Daley's Drywall), we aren't too afraid of this aspect as GC's as well as owners know we do good work and we have that relationship with them... for example we've done many Google projects successfully as a long term subcontractor for Skyline. We don't expect a decrease in jobs as Skyline knows we'll do a good job for a good price." Even with budget setbacks and more budget control due to the effects of Covid-19 on the economy, every company agrees that having a solid relationship with the general contractor will always be beneficial, especially during the pandemic. For example, if Skyline Construction receives three bids from different drywall subcontractors for a thirty thousand square foot job and out of those companies, the only one they know is Daley's Drywall. If one of the unknown companies sends in a bid that is lower than Daley's by about ten thousand dollars and if it is assumed that for an average tenant improvement that drywall costs fifteen dollars per square foot, the drywall costs would come out to be around \$450,000. With this total drywall cost in mind, a ten thousand dollar difference in bids may be acceptable to Skyline as they know how Daley's Drywall operates their jobs and that they will complete their scope within budget opposed to choosing the unknown subcontractor as difficulties may arise that take more than a ten thousand dollar toll on the budget.

Another item that was seen becoming an issue were job walks as the pandemic has caused owners to follow Covid protocols and keep the least amount of people onsite. Some owners allow groups of subs to visit the site for a short period of time while some are stricter and allow only one person at a time per job walk. Interviewees have expressed how much this affects costs during the estimate and bid process because "it's hard to estimate or bid on something that you haven't seen in person. Pictures or a short visit can only go so far to create an accurate and reliable bid." (Interviewee D) Interviewee A also agrees with the previous statement, "Job walks have definitely been a huge change, and sometimes a difficulty to do... when we go on job walks, we rarely get to have contact with any other sub. We're carpenters so we generally know where every system needs to go like any electrical, HVAC, Doors, etc., because we rough-in their systems and equipment. On a normal job walk, we would be able to coordinate with each other on where they think their systems will be placed and we can create a more accurate estimate." Interviewees pointed out that some companies will skip the job

walk entirely, leaving the building plans as the only reference for estimation. The plans alone make it extremely hard to create a reliable bid in a tenant improvement job as drywall subs are constantly dealing with existing conditions that are not shown on the base building plans. It is imperative for whoever is creating the bid to see what the current conditions actually are so that the management team can properly plan an approach to their scope of work. Base building plans are also known to have discrepancies within them that can lead the estimator off track which will affect the field management and crew as they may plan for certain conditions and experience something quite different. It can be deduced that due to the lack of visitation to the site before the proposal is even sent will be reflected in the bid as the estimating process will include a portion of guessing where other trades will be working. The level of coordination that drywallers have said they are limited to is an inevitable path to some change order work. Without the “meeting of minds” between every sub on the site, the general contractor will have to use some of the owners allowance to pay for that change.

After speaking with each contact about the average cost per square foot of drywall for a tenant improvement in the Bay Area, average costs per square foot were ranging from fifteen to twenty dollars. It was expressed by each interviewee that this value has not changed dramatically over the course of Covid-19 as each drywall subcontractor interviewed does not have an average Covid premium. “Covid costs associated with tenant improvement projects are extremely job specific as owners and general contractors have different ways of doing things... even with the same size of job, every site is run differently. At Daley’s, we try to be as efficient as possible and we will work with the general contractor to address how these costs will be handled in whatever form works best for that specific job... if some Covid protocol that is made by the owner is too above and beyond, then we will come together as a team to work with the owner on other routes ” (Interviewee A). “We like to keep a good relationship with every general contractor we work for... depending on the job and how much the cost impacts are, we may not even mention it and absorb the cost. If it’s something that’s only for a thousand dollars, then that will be covered by our overhead.” (Interviewee F) Large Covid premiums are seen on bigger jobs where premiums can be up to \$600,000 on a \$25 million drywall subcontract.

However, on tenant improvement jobs, these large drywall companies will have a conversation with the general contractor on where exactly Covid cost impacts will be billed. On a baseline thirty thousand square foot tenant improvement, companies were hesitant to add any expenses as they may outbid themselves. At the start of the outbreak, Interviewee B approached bidding by adding an extra three percent on top of the estimate to cover any costs that may come up from Covid in terms of materials. This three percent covers any PPE required by the owner or general contractor such as masks, hand sanitizer and even foot coverings for stricter requirements. “The economy has gone down because of coronavirus, costing everyone money... now that owners have less money to spend with a tighter budget, the TI industry has moved towards hard bidding instead of negotiated bidding... we have to respond to that hard bidding accordingly to fit in the budget... instead of bidding with twelve percent on top, we’re happy to get six to eight percent.”(Interviewee B) Now that owners have a smaller budget, general contractors that previously used negotiated bidding have to use hard bidding to get awarded projects. Pre-pandemic general contractors would negotiate bids with owners that would have a flexible budget as many contractors had relationships with owner companies that had

their money's trust in the general contractor's hands. Nonetheless, with a damaged economy, owners are forced to look purely at the numbers rather than the previous reputation they had with a specific GC. This creates a trickle-down effect to the way subcontractors create their bids and proposals as now the general contractors are looking at bids to stay in budget rather than hire a company they know. While this might not play a role in some drywall subcontractors that have both the relationship and cheaper bids, many drywall companies will have to follow Creative Drywalls lead and take a cut in profit so that they are awarded projects that keep the company's cash flow steady.

Conclusion

All of the contacts that were interviewed are very optimistic about the future of the construction industry in the coming months. The vaccine for Covid-19 is expected to come out by the end of the year in 2020, with the economy and business slowly going back to the way it was. However, the impact of Covid-19 is believed to have a strong impact on the designs of office spaces in the near future. The trend of open office spaces may be halted and reverted back to cubicle and enclosed offices style that has been seen in previous years. Every individual in the country has been affected by Covid whether it has reached a family member, caused a furlough or lay off from work they simply have rarely left their house, causing anxiety or some condition for some individuals. Due to this large disconnect everyone has had with normal, everyday life, a reflection may be seen in how companies operate in the future. With regards to the Bay Area, there are many tech companies that may keep their quarantine work model and utilize working from home and meeting occasionally together since there was no substantial change to productivity in the tech industry due to coronavirus. This could reflect on future tenant improvements as certain clients may reduce the amount of properties they are renting as they simply no longer need the space if employees can work from home. However, for large companies like Google and Facebook, these spaces are necessary as it catches the eye of a potential employee as they wish to be involved in the culture of the company. Companies like Google, it is an experience working for them and they have set a reputation of the worker being able to have their lifestyles incorporated into the work space so they wouldn't have to leave work. People in the tech industry want to have that life at Google and that's what sets a company like Google apart from the rest of the tech companies. For them, having their spaces up and running is imperative to keeping their company culture thriving.

The future for all drywall companies is very dependent on how they handled the events that transpired over the course of Covid-19. The pandemic came with various challenges and obstacles that needed to be mitigated by every party included in a construction contractual agreement appropriately. One could say that it was a good test to see how companies and representatives coordinated with each other during a time of great uncertainty. If a drywall company takes advantage of Covid-19 and comes up with suspicious numbers or passes on blame to another trade to help save money, chances are high that whatever general contractor hired them before are not going to work with them again. It was stressed time and time again by every company that they must keep good relationships during Covid-19 with the general contractor and owner so that their future looks better post-pandemic than it did pre-pandemic.

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