

INNOVATION. SUSTAINABILITY. SECURITY. SAVINGS.

The big, small, and just right size companies.

General contracting has evolved over the years to include several layers of contractors. These layers if managed effectively lead to the right expertise in the right place; however, if mismanaged, leads to cost exploitation and inexperienced Laborers.



<u>Author</u> Scott Dupriest, SVP Surveillance & Technology

Your facility is entering the final phases of construction, it's time for electrical contractors to get started on the final touches. An outlet here. New lights hanging above the break area. Intranet jack there. Security camera over there. Access control downstairs. You've picked the top electrical installation company in the area and are excited to unveil the new space to your clients and team in the coming weeks.... then the unexpected happens.

At final walk through, the electrical looks great but the low voltage wiring is messy, only half the jacks work, the security camera is pointed in the wrong direction, and there are not enough key fobs for everyone on the team to get into the building. Aggravated, you call the specified maintenance number to be routed to an offshore call center. They dispatch a technician who arrives with no experience, no information, and the frustration continues – sound familiar?

Let's start by exploring the difference between electrical engineering and low voltage solutions. Low voltage solutions encompass any piece of electric wiring or equipment that uses 50 volts or less: intranet, networking, Wi-Fi, security cameras, sound, fire alarms, access control, audio visual, etc. Low voltage solutions are a vital part of electrical engineering services and products. As such, Electrical engineers often sub-contract low voltage work to experts in the industry as they are an indispensable part of the overall electrical installation team.

So where does this go wrong? Reputable electrical engineering and/or general contracting (GC) firms will contract with 2-7 sub-contractors specializing in various areas: lighting, wiring, fire alarms, security, access control, audio visual, etc. This is a 1 sub-contract level deep model and is standard practice within the industry. Let's break down the players we will be discussing:

- Engineering / GC firm = Contractor A: This is who the customer contacts directly to hire for the job.
- 1 sub-contract level = Contractor B: This is who Contractor A hired to complete the work requested by the customer.
- Contract Labor = Contractor C-D: Sometimes we see Contractor B outsourcing the labor that is being requested from the top. This is often where things go wrong

Let's explore a real-world example like the above, a local retailer built a new warehouse facility. This facility housed multi-million dollar automated equipment. Contractor A was responsible for installing the equipment, and outsourced low-voltage labor to Contractor B. All normal. Contractor B, instead of doing the work themselves, outsourced the work to another contractor, Contractor C. Contractor C arrived on the job and produced extremely poor-quality work (see below).



Exhibit 1a. Before: Wiring & Connectors

Once Contractor A discovered the subpar work at the large retailer mentioned above, Contractors B & C were immediately dismissed, and a new Contractor B was brought in. The below is a picture of work quality performed by a low voltage expert, with in-house employees and expertise.

Exhibit 1b. After: Wiring & Connectors



In this example, there were 2 layers of sub-contractors, leaving Contractor A and B with subpar work and no method of recourse other than to redo the work leading to missed deadlines, increased cost, and as in most cases for you, the customer, absolute aggravation, and risk.

This method of multi-level sub-contracting occurs for three reasons.

- Lack of Expertise: The subcontract world is HIGHLY competitive. A firm may have one piece of expertise, but not all. They naturally sub-contract, but often lack the expertise or time to fully vet their contractors.
- **Insurance:** The Contractor As of the world carry hefty insurance premiums. Subcontracting allows those unable to afford / achieve those premiums to jump into work that may otherwise not be available.
- **Greed:** It allows Contractors B-D to perform very little work, take fees off the top from Contractor A's offer, and hire cheap labor at the bottom of the pyramid.

It is vitally important that customers understand how Electrical Engineering and/or General Contracting firms source their contractors and what their requirements are for those vendors to join the team.

Multi-level subcontracting further persists in the break / fix and maintenance arenas. In the opening example, it shows how multi-level contracting can fail you, the customer, during repair. In most cases, once Contractor A completes the necessary installation phases, they exit the job. In others, Contractor A or B may remain available for repair calls or propose a maintenance agreement. IF they have employed Contractors C-D, the same behavior is likely to continue.

When considering you next electrical contractor, security contractor, or low voltage solutions provider, start with these three questions:

- Does the contractor sub-contract any work? If so, what criteria is used to vet those vendors and how often are they recertified?
- Are all contractors (primary or sub) licensed and insured to perform work in your location?
- What is the process to request break / fix / maintenance / upgrades in the future? Who conducts the work?

Vendors should be recertified yearly by any general contractor service. Each state often requires professional licenses for each of these areas. If properly insured, their insurance agent will have required the professional license. Continued engagement processes for break / fix / maintenance / upgrades should be agreed upon prior to completion of the initial install.

At GLCC, our team of 25+ year industry experts are licensed, certified, and insured to conduct low voltage work. All work is conducted by GLCC employees with dedicated account managers to follow our customers throughout the lifecycle of their projects. Choosing to be the only contractor that works with our customer, rather than subcontracting out, we can control the quality of our work. This allows us to get the job right the first time.