

The First Cost of Traditional Built Headwalls vs. The ForWard Headwall

An Independent Third-Party Case Study by Layton Construction



As a CM / GC, Layton Construction Company, LLC, seeks continuous improvement. How can we build more efficiently? How can we save money? How can we improve the owner experience? One solution that answers all three of these questions...the patented ForWard Headwall solution, a Division of SWA Inc. headquartered in Nashville TN.

SWA Inc. has built traditional headwalls, here-in defined as “metal studs, drywall, and plastic laminate panels”, for healthcare providers for 40 years. Therefore, it was with great confidence based on their extensive experience that they maintain their ForWard Headwall to be a less expensive solution on a “first cost” basis. However, there was no quantitative or qualitative empirical data available which would validate such a claim.

Therefore, I agreed to provide assistance when SWA decided to conduct a head to head comparison. No monies (or benefits of any kind) were conveyed to me or to Layton Construction, LLC, in exchange for my participation.

ForWard Headwall agreed to build a production studio in the R&D area of their main plant located in Nashville, TN. David Martin of Creative Services was hired to provide lighting and cameras. I, Brooks Rutledge, a Project Director for Layton Construction Company, LLC, arranged third-party subcontractors as necessary for construction. On one side was framed an 8’ wide opening for the ForWard Headwall. On the other side, we framed a full width headwall using conventional construction methods. The acuity level requirements (ie: med gases, electrical, and low voltage) and options (ie: art, lighting, and trim) were identical for both headwalls.

The filming was done in 5 second frames allowing us to calculate every screw and “man minute” of labor required. Typically, when utilizing the ForWard Headwall solution, we frame in the opening and the header and stub in OH MEP, as

required. Then, ForWard installs the headwall which also serves as the demising wall between patient rooms.

From past experience, we know the ForWard Headwall solution is installed and 100% complete, ready for the single point MEP connections in 35-45 minutes, once distributed to point of placement. At such time as one includes the framing of the opening into which the ForWard Headwall fits, the entire ForWard Headwall case study was completed in 9.5 hours at an actual cost of \$8,698.14. It is important to note the conventional framing and header materials, plus labor cost for this side was \$3,119.30. Therefore, the net cost of the ForWard Headwall solution was \$5,578.84.

Conversely the traditionally built headwall took 38 hours to build at a total cost of \$10,766.09. Thanks to the production studio environment, time lapse imagery is available which supports the above statistics. The labor costs are actual Q4 costs as submitted by subcontractors working in Nashville, TN.

Other observations made through the course of this study were that the patented ForWard Headwall solution arrives in 3 parts and is installed by two men, whereas the traditional headwall approach takes approximately 30 parts and as many as 6 different trade subcontractors. Moreover, the ForWard Headwall is delivered in 24" wide modular units allowing for easy transport, both vertically and horizontally, throughout the facility making it an excellent option for renovation projects in an existing facility where larger pre-fabricated units are impractical.

Obviously, when the cost variance between the two methods is extrapolated to include multiple patient rooms on multiple patient floors, the benefit to our owner(s) is meaningful and substantial.

The financial benefit as conveyed here-in does not consider the "speed to market" impact, nor does it consider the long-term benefits to both for-profit and not-for-profit institutions (ie. durability, ease of maintenance, etc.).

Despite ForWard Headwall's lack of data indicating a lower first cost, this experiment has proven the patented ForWard Headwall solution to be a more efficient first-cost means as compared to traditional construction methods.

Brooks Rutledge

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