Classroom Time For Prospective Estimators

Construction Estimators Can Indeed by Taught in a Classroom as the Famous Carter School of Estimating Continues to Spawn an Increasing Flow of Competent Graduates

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Most wall and ceiling contractors would agree that the most critical job they do is estimating. Simply stated, estimating is where you either make money or lose your shirt.

Unfortunately, estimating is not an exact science. Quantity take-offs can be precise, but production rates are not, since averages come from highs and lows.

Most estimators in our business learn from past experience. We (hopefully) learn from our past mistakes. A lot of estimating in the wall and ceiling industry is little more than educated guesswork. And for the company to survive, we hope that we guess too high more often than we guess too low.

As big as our industry is, and with as many dollars at stake as there are, there should be a place that trains estimators how to do it right. There is: the Carter School of Estimating, in Hudson, New Hampshire.

The Carter School of Estimating was formed by Harry G. Carter more than a dozen years ago, and has trained hundreds of estimators since. Harry Carter, the son of a New England painting contractor, formed his own company, Carter Associates in 1966 to meet the industry’s tremendous need for training in this critical area. Separate estimating classes are offered in painting, wall and ceiling work, and asbestos abatement.

In addition to conducting several training courses each year, both in New Hampshire and for associations like AWCI, Carter’s firm also writes and markets estimating software, which has met with rave reviews in the industry.

Off to School . . .

To get to Hudson, New Hampshire, you can either fly into Boston’s Logan Airport or into the Manchester (NH) Municipal Airport. Hudson is about an hour’s drive north via I-93. If you fly into Manchester, someone from Carter Associates will pick you up and take you to your hotel in nearby Hudson.
Students stay at the Abbott Inn in Hudson, a comfortable, modern three story hotel. Lodging at the Abbott Inn is included with class tuition. All the rooms at the hotel include kitchenettes, allowing students to prepare some of their own meals and cut down on expenses.

The hotel is about a 10 minute drive from the school, which is adjacent to the Carter residence on Sullivan Road. Classes are held on the second floor of the building, while Harry’s office and printing operation take up the first floor of the school.

The classroom itself is bright, airy and open, with about fifteen drafting tables provided as desks for the students. Printing calculators are furnished at each student’s desk.

Getting Down to Business . . .

Each two week course begins promptly at 9:00 AM on Monday, April 13. Attending the program are students from all over, usually aged between 25 and 35 years old. Most of them have limited, if any, previous estimating experience.

After introducing himself to the class, Harry wastes little time in getting rolling. He starts by reviewing a printed time clock, the first item in the notebooks.

One of the central tenets of the Carter Estimating System is that in the construction industry, due to breaks, etc., employees are only truly productive for about six and a half hours out of a standard, eight-hour day.

This loss time, Harry contends, accounts for 23% of a typical work day. He warns that most labor pricing manuals do not consider this fact. While a contractor pays his men for 50 weeks, 250 days and 2000 hours, actual production is 41 weeks, 203 days and only 1625 hours.

Thus, when Harry says that an employee will average 500 linear feet of trim a day, the employee is actually doing it in six and a half hours rather than eight hours.

Since many contractors bid on a 10% profit margin, only 10% of a typical 390 minute work day, or 39 minutes, can be considered “profitable” time.

Pricing . . .

The next item covered the first morning of class is just as important—overhead compilation. About as critical in this system as the 390/480 principle is developing a proper selling price per man day, taking into account the basic employee wage, fringes, overhead and profit.

The hourly overhead rate is developed by dividing total overhead by man hours (if you don’t currently track man-hours, divide your total employee labor expense by your hourly wage). It isn’t difficult to see how a large shop can have a much smaller hourly overhead charge than a smaller shop.

The resultant selling price figure was used throughout the course with given production rates to develop labor unit costs on various systems. Material unit costs are developed simply by using given purchase prices and how far the material goes.

Boiled down to its essentials, the Carter philosophy is that jobs with high material to labor ratios are the best jobs to bid to win.
The computer is rapidly becoming a vital estimator's tool and the monitors in front of the student show that instructions cover the latest technology in rapid, accurate estimating.

Got a question? Who better to explain the complexities of a large project than a man who has prepared thousands of bids.

High material to labor ratios are the best jobs to bid to win. Reason: the more labor you have in a job, the more risk you have that your “average” production rates won’t be met with any consistency. That’s why Harry says that the wall and ceiling business is generally “better” than, say, the painting business, where labor accounts for typically 85% of the costs on a job. On traditional commercial work, jobs that “repeat themselves” (with a lot of walls and ceilings) are clearly most profitable.

This may all be common sense to contractors with years of experience, but it isn’t to newcomers in the class, who have spent most of their careers in the field.

Harry also concedes that there was nothing wrong with taking a job at cost, since a company can’t pay its overhead on jobs that don’t exist.

For a skilled estimator bidding in the typical commercial market, he says that a good “winning ratio” at 10% is one out of ten jobs. At 5%, this increases to one out of five. A contractor needs volume to pay his overhead, and you get that volume by bidding at a lower margin.

With the preliminaries out of the way, students quickly get into taking off some jobs. While the course is not intended as an “introduction to blueprint-reading” and assumes some experience in reading plans, most students have never really taken off a drawing before. Thus some time is spent using a tape to measure off rooms, count openings, and review finish schedules.

**Quantity Take Offs . . .**

Over the duration of the course, students take off quantities and bid
several jobs, using actual plans for local projects. While the actual jobs vary with each course, it’s not unusual to take off a small medical center, an apartment building, and several steel tanks.

For wall and ceiling industry students, several days will be spent on vinyl wallcoverings alone. Harry says that far too many contractors sub out vinyl wallcovering jobs because they aren’t confident in figuring them. His “drop” method of figuring vinyl jobs, usually beats the traditional square foot method by a 10%-15% margin.

A full day spent on estimating several unique drywall jobs and a half a day was spent figuring swing stage and scaffolding costs. A painters’ course addresses dry mil thicknesses, and touched on estimating drywall tapping. The course geared to the wall and ceiling industry obviously differs.

Production Rates . . .

Between the various take-offs, Harry likes to introduce another dozen or so production rates. Unlike other estimating systems, the Carter system uses “difficulty” factors. While most of the production rates stay pretty much the same, these factors change significantly depending on the job at hand.

During the course, it’s not unusual for students to assemble a list of over 75 different items with factors, but only a limited number of production rates. This enables students to “common sense” most calculations down the road, rather than trying to learn dozens of varying production rates. It’s a system that makes sense.

The course wasn’t all hard numbers. Harry’s years of experience have provided him with literally dozens of informative and entertaining anecdotes about the construction industry. Each of the students also brings something to the course, so cross learning occurs during and outside of class.

Since the nightlife in Hudson leaves something to be desired, most evenings were spent at the hotel going over notes from the class, and often students find themselves reviewing a set of plans together.
The Carter School of Estimating, in Hudson, NH, is located in this attractive building which is situated near the Harry Carter Home. Students are housed nearby in cooperating motels.

Following a question and answer session on the last morning, the class adjourns at Noon, giving students an opportunity to catch an afternoon flight home.

In addition to the knowledge, Harry gives the students a supply of the many different forms used in the class. These forms alone can help many contractors improve their estimating, since organization is so critical when bidding any job.

Perhaps even more useful than the information gained from the class is the confidence in their own estimating ability that is a residual of the Harry Carter school.

The Carter School of Estimating is strongly recommended for anyone who wants to improve his or her estimating skills. The fact that Harry has successfully trained well over 1,000 estimators, including dozens of AWCI members, attests to the soundness of the curricula and the experience and knowledge of Harry Carter.

(Editor’s Note: For more information, contact: Carter School of Estimating, 22 Sullivan Road, Hudson, New Hampshire 03051, (603) 883-0739.

Mr. Carter is a member of the AWCI Consulting Team. AWCI members can receive a substantial discount off the usual Carter School of Estimating registration fee by registering through AWCI. Please contact the AWCI staff for additional details.)