

Retail Labor Rates and Supporting Events

■ Xactware's Tools for Increased Pricing Accuracy

Structural damage is generally the most difficult type of repair service to estimate. Auto, marine, or aircraft repair consistently involves a finite number of known and easily identifiable parts, which are removed and replaced using well defined procedures executed inside a controlled environment. Structural repair involves an almost infinite figure of potential materials and processes combinations usually in an uncontrolled environment. Consequently, a substantial number of price list items must be available to a structural repair estimator.

Xactimate®, the industry's leading estimating tool by Xactware, Inc. is designed for Microsoft® Windows operating systems. To allow users to quickly sift through extensive price lists and place correct line items into the estimate, Xactimate uses highly sophisticated tools called Xperts®, which are special searches and filtering techniques. This same level of sophistication manages the pricing research.

To understand the need for pricing sophistication, consider that the average Xactimate price list contains about 7,000 line items, each of which is broken down into an average of at least four components (e.g., labor components, several material components, and equipment components). This means the average price list contains about 28,000 components. It is extremely difficult for a contractor or price researcher to verify accuracy and stay current on that many prices.

Each of the approximately 28,000 components belongs to one of three categories: equipment, material, or labor. Material and equipment components are the most numerous. Fortunately, they are also the simplest to calculate and verify. With national structural material chains such as Lowe's® and Home Depot® and with easy access to equipment rental yards, any vendor or homeowner can verify the cost of a material or equipment component.

The reality is that in today's market, homeowners and others can usually purchase or rent these items for prices similar to those paid by the contractor. Questions about the accuracy of material and equipment pricing are rare and answers are easily verified. As a result, material and equipment pricing problems are easily resolved in the unlikely event of an error.

By far the most challenging task is the determination of an accurate and fair price for labor. It is labor which makes the service provided by a structural repair contractor unique. Labor is the contractor's special expertise expended in the customer's behalf, measured by time.

Openness and accuracy in total markup for structural repair have been hampered by a pervasive misperception. This misperception is that line item unit prices are, or should be, calculated based only upon the contractor's actual cost of labor, material, and equipment. Put another way, the misperception is that the overhead and profit markup, often ten percent for overhead and ten percent for profit, represents the total appropriate markup for any structural repair estimate.

Structural repair contractors have been relying on additional markups inside unit pricing (before overhead and profit markups are added) for decades. In other words, the prices being used today include markups far in excess of the overhead and profit percentages. This does not mean those markups are necessarily excessive or wrong. In fact, the problem has been that until now, there has been no effective way to determine whether markups are fair or not. In Xactimate, Xactware uses a concept called "Retail Labor Rates" to address the added markup and to open it for evaluation. Retail Labor Rates also greatly simplify pricing maintenance and comparison.

The Retail Labor Rate with its internal markup is placed in the Labor component category. Material and equipment prices are understood to be actual prices. Retail Labor Rates represent a fully burdened labor expense for completing the process described in a line item. The Retail Labor Rate markup is designed to be sufficient to maintain the existing internal markup, and thereby produce the same unit price set by the market today.

The general markup (usually ten and ten) will still be applied to the unit price. Consequently, all components contained in the unit price (the fully burdened labor rate, the actual material, and the actual equipment rates) are still marked up at the general rate (ten and ten) at the end of the estimate. The Retail Labor Rates will not change the estimate total nor will it change the total markup found in today's market-competitive estimate. By loading internal markup exclusively onto the Retail Labor Rate, the fairness and accuracy of that markup is open for observation.

Remarkably, only a small number of Retail Labor Rates is required for a full price list. All 7,000 line items can be calculated using about three dozen Retail Labor Rates. This means that where Xactware price data is accepted for material and equipment, the market competitiveness of an entire price list can be determined by evaluating only two dozen Retail Labor Rates.

Whatever the contractor selects will go into a Retail Labor Rate. His or her rate will have to be competitive with similar Retail Labor Rates of other qualified contractors. When Xactware prices nails, it does not consider the cost to mine and smelt the ore or to manufacture and ship the nails. The price listed for nails is the price at a local, competitive vendor. The market determines the fairness of those prices. The same forces should be left to prevail on Retail Labor Rates provided by local contractors.

Contractors and adjusters will no doubt find it strange to see fully burdened Retail Labor Rates that are significantly higher than labor rates listed in the past. None of us really believes that the auto mechanic gets the \$55.00 per hour that shows up on our repair bill. We are willing to accept this as a fully burdened labor rate only if it is competitive with similar shop rates in our area. Retail Labor Rates work the same way.

The concept of a Retail Labor Rate already exists in the structural repair industry. To verify this, ask any repair contractor how much he or she charges for a specific type of laborer (e.g., what is your hourly charge for a skilled carpenter) on a cost-plus job. Like the auto repair shop, in order to account for labor overhead (and in order to stay in business) the contractor will invariably quote an hourly rate that is significantly higher than the actual wage expense.

I. How Xactware makes the transition from the old methodology to the new Retail Labor Rate pricing strategy without changing unit prices

Unit Price Breakout
DOR AV Interior Door

Type	Component	Comp \$	Yield	Waste	\$ Per Unit
LAB	CARP-FNC	15.550	1.060 EA/HR	0.000	14.670
MAT	DOR	78.353	1.000 EA/HR	0.000	78.353
MAT	FNC SHIMS	5.600	10.000 EA/BN	5.000	0.589
MAT	NAIL6F	1.013	1.093 EA/LB	5.000	0.976
Hard Costs: Lab: 14.67 Mat: \$79.92				Equ: 0.00 =	\$94.59
				Labor Burden:	\$3.77
				Soft Costs:	\$14.20
Untaxed Unit Price:					\$112.56

Unburdened worker wage

Internal markup applied to the entire assembly

Calculating the Item's Labor Price

DOR AV Interior Door

Type	Component	Comp S	Yield		Waste	\$ Per Unit
LAB	CARP-FNC	15.550	1.060	EA/HR	0.000	14.670
MAT	DOR	78.353	1.000	EA/HR	0.000	78.353
MAT	FNC SHIMS	5.600	10.000	EA/BN	5.000	0.589
MAT	NAIL6F	1.013	1.093	EA/LB	5.000	0.976
Hard Costs: Lab: 14.67 Mat: \$79.91 Equ: 0.00 =						\$94.59
Labor Burden:						\$3.77
Soft Costs:						\$14.20
Untaxed Unit Price:						\$112.56

Subtract Material and Equipment from the Unit Price

Unit Price	112.56
Material	-79.91
Equipment	-0.00
Labor for this item	\$32.65

Calculating the Item's Retail Labor Rate

DOR AV Interior Door

Type	Component	Comp S	Yield		Waste	\$ Per Unit
LAB	CARP-FNC	15.550	1.060	EA/HR	0.000	14.670
MAT	DOR	78.353	1.000	EA/HR	0.000	78.353
MAT	FNC SHIMS	5.600	10.000	EA/BN	5.000	0.589
MAT	NAIL6F	1.013	1.093	EA/LB	5.000	0.976
Hard Costs: Lab: 14.67 Mat: \$79.92 Equ: 0.00 =						\$94.59
Labor Burden:						\$3.77
Soft Costs:						\$14.20
Untaxed Unit Price:						\$112.56

To derive the Retail Labor Rate, which produces \$32.65 at the listed yield, multiply \$32.65 time the Yield (32.65×1.060) for a Retail Labor Rate of \$34.60.

II. Retail Labor Rate appearance in Xactimate

Item Activity Information

Category: DOR Selector: AV Activity: + Phase: 08 Interior Doors

Description: Interior door unit

Assembly Item Table

Type	Component	Component \$	Direct Yield	Spl Event (%)	Yield	Price Per Unit
RLB	CARP-FNC	34.600	2.000 EA/HR	DOR-LAB (47.000)	1.060	32.650
MAT	DORCOL	78.353	1.000 EA/EA	(0.000)	1.000	78.353
MAT	FNCSHIMS	5.600	10.000 EA/BN	FNCSHIMS (5.000)	9.500	0.589

Buttons: Add... Edit... Delete

Definition: Includes: pre-hung interior door, hinges, jamb, stop, casing (both sides), finish nails, wood shims, and installation labor. Excludes: lockset and painting. Quality: hollow core, colonist style raised panel hardboard door slab with pre-drilled holes for lockset. Paint grade softwood jamb and streamline casing.

Supporting Events:

Material: 79.92 i

Equipment: 0.00

Retail Labor: 32.65 i

Market Conditions: 0.00

Replace Price: 112.57

Buttons: Illustration Sales Tax OK Cancel Help

All items sharing a common labor component (i.e., all items using finish carpentry labor) are evaluated and contractors are surveyed to produce one fully burdened Retail Labor Rate, which the line items can share. Old markups are replaced by equivalent Retail Labor Rate markups. Not only do Retail Labor Rates allow you to evaluate pricing more quickly, they also allow you to change prices more easily. If you decide it's time to adjust the Retail Labor Rate for finish carpentry, you only have to change it once to modify the price for every line item using the finish carpentry Retail Labor Rate. This means the entire price list can be fully and accurately re-priced by replacing about two dozen Retail Labor Rates. It also allows you to quickly change estimate pricing based upon special-circumstance Retail Labor Rates.

Where unique circumstances create a need to fine-tune a unit price without changing its Retail Labor Rate, Xactimate provides a field called "Market Conditions" for making those adjustments. Market Conditions represents pricing variations, which cannot be accounted for in any of the three component categories. If a catastrophe temporarily drives the market price of a line item (e.g., roofing) upward by \$20, that amount can be added in the Market Conditions field. Market forces will eventually eliminate Market Condition adjustments as the local market stabilizes or the components change to reflect the new pricing. Due to the challenge of discerning a Retail Labor Rate common to all items sharing it, some items have been adjusted using Market Conditions in Xactimate price lists in order to accurately maintain current market unit pricing.

Once a fair, competitive price for the Retail Labor Rate is established, a precise determination of total quantity time required to perform the task specified in the line item is critical. Xactimate uses a concept called "Direct Yield" and "Supporting Events" to open up this process. Supporting Events are those indirect things which must occur in order to accomplish direct repairs. A material Supporting Event is the material that will be necessary for the installation to be accomplished but will not be found in the final work product (e.g., carpet waste). Labor Supporting Events equate to time spent in addition to the labor that will be expended directly on the finished work product. Material pickup, tool and material setup (placement in the structure and readied for the job) and cleanup are examples of Supporting Events for Direct Labor.

Direct Yield (that which applies exclusively to the finished product) is easily determined, yet the calculation of Supporting Events for the structural repair industry is far more challenging. The pricing researcher must determine the average time lost to Supporting Events. The Assumption is that this average amount will be sufficiently accurate for structural repair estimation.

Until Xactimate, the yield calculation portion attributable to Supporting Events Assumptions was not available for the field user to see. Xactimate changed that by breaking out both labor and material net yield details, which directly produce the finished work product, and also identifying labor and material Supporting Event Assumptions.

Xactimate details the Assumptions included within the Supporting Events. In the following example, the net yield is based upon a set of Assumptions about the time it often takes to pick up, set up, and clean up (Supporting Events).

III. Xactimate Supporting Event Assumptions/Net Yield Calculation

Item Activity Information

Category: DOR Selector: AV Activity: + Phase: 08 Interior Doors

Description: Interior door unit

Assembly Item Table

Type	Component	Component \$	Direct Yield	Spt Event (%)	Yield	Price Per Unit
RLB	CARP-FNC	34.600	2.000 EA/HR	DCR-LAB (47.000)	1.060	32.650
MAT	DORCOL	78.353	1.000 EA/EA	(0.000)	1.000	78.353
MAT	FNC SHIMS	5.600	10.000 EA/BN	FNC SHIMS (5.000)	9.500	0.589

Buttons: Add... Edit... Delete

Definition Supporting Events

- Wood shim assumption is based on waste due primarily to: handling, cutting and fitting.
- Nail assumption is based on waste due primarily to: handling and spillage.
- Labor assumption is based on an 8 hour day with 10 min planning, 60 min drive time mat/equ pick up, 20 min breaks, 60 min set up/clean up, and 75 min overall loss

Material: 79.92 i

Equipment: 0.00

Retail Labor: 32.65 i

Market Conditions: 0.00

Replace Price: 112.57

Buttons: Illustration Sales Tax OK Cancel Help

The example indicates that a finish carpenter can accomplish the Direct Installation of the door in about 30 minutes (two doors per hour). It also shows an Assumption that the Direct Yield will be reduced by 47% when Supporting Events are factored into the calculation, resulting in a Net Yield of 1.06 doors per hour.

The bottom line is that with Retail Labor Rates and Supporting Events, Xactimate provides the structural repair industry exciting new levels of accuracy, openness, and fairness.