

Cost Markups and Adjustments

In M32, cost markups are defined as all of the percentages and adjustments added to the base Direct Costs in an estimate. Markups can include overtime adjustments, taxes, and price adjustments, as well as contractor and subcontractor markups, and owner cost adjustments.

This chapter presents an overview of the process of defining cost markups, explains the concepts involved in defining and computing markups, and presents reference information on the M32 windows and tabs used.

- Cost Markups and Adjustments Overview
- Overtime
- Adjustments and Taxes
- Contractor Markups
- Owner Markups


Cost Markups and Adjustments Overview

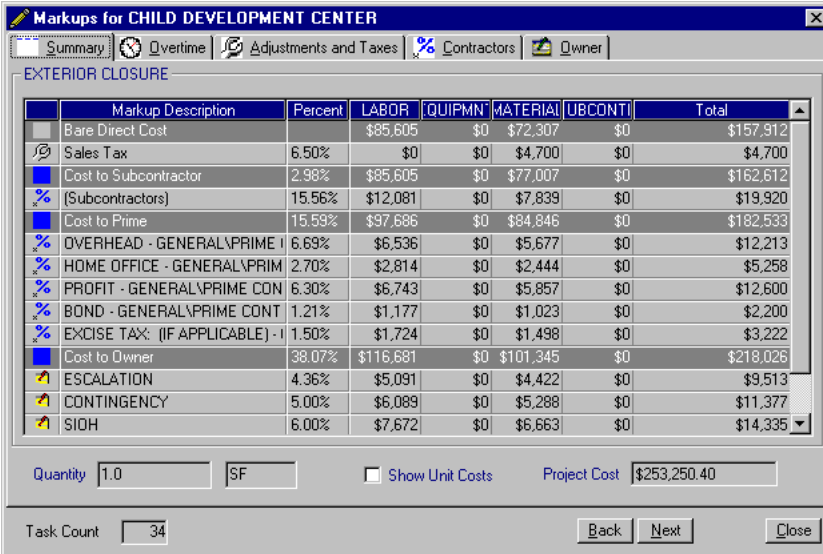
M32 allows you to apply multiple-levels of cost markups and adjustments, to any task or folder in an estimate.

Markups Form

By highlighting any task or folder in the sheet or tree panel and then displaying the Markups form, you can view or change the markup information for that task or all tasks below that folder.

To display the Markups form

- 1 In the Project Database, highlight any folder or task in the tree panel or sheet panel.
- 2 Choose View > Forms > for Markups, or click the  toolbar button.



	Markup Description	Percent	LABOR	EQUIPMN	MATERIAL	SUBCONTI	Total
	Bare Direct Cost		\$85,605	\$0	\$72,307	\$0	\$157,912
	Sales Tax	6.50%	\$0	\$0	\$4,700	\$0	\$4,700
	Cost to Subcontractor	2.98%	\$85,605	\$0	\$77,007	\$0	\$162,612
	(Subcontractors)	15.56%	\$12,081	\$0	\$7,839	\$0	\$19,920
	Cost to Prime	15.59%	\$97,686	\$0	\$84,846	\$0	\$182,533
	OVERHEAD - GENERAL\PRIME	6.69%	\$6,536	\$0	\$5,677	\$0	\$12,213
	HOME OFFICE - GENERAL\PRIM	2.70%	\$2,814	\$0	\$2,444	\$0	\$5,258
	PROFIT - GENERAL\PRIME CON	6.30%	\$6,743	\$0	\$5,857	\$0	\$12,600
	BOND - GENERAL\PRIME CONT	1.21%	\$1,177	\$0	\$1,023	\$0	\$2,200
	EXCISE TAX: (IF APPLICABLE) -	1.50%	\$1,724	\$0	\$1,498	\$0	\$3,222
	Cost to Owner	38.07%	\$116,681	\$0	\$101,345	\$0	\$218,026
	ESCALATION	4.36%	\$5,091	\$0	\$4,422	\$0	\$9,513
	CONTINGENCY	5.00%	\$6,089	\$0	\$5,288	\$0	\$11,377
	SIQH	6.00%	\$7,672	\$0	\$6,663	\$0	\$14,335

Quantity: 1.0 SF Show Unit Costs Project Cost: \$253,250.40

Task Count: 34

Buttons and Controls

The Markups form provides these buttons and controls on all of its tabs.

Task Count This field shows the number of tasks included beneath the currently selected folder (or “1” if the current selection is a task). This field is displayed for all the tabs of the Markups form.

Back	Display the Markups form for the previous task or folder in the database.
Next	Display the Markups form for the next task or folder in the database.
Apply	Apply any changes you have made on the form, and leave the form displayed.
Close	Apply any changes you have made on the form, and close the form.

Tip: You can also click the X icon in the upper right corner to close the form. This method removes the form from memory and as a result frees system resources. However, the form will be slower to reload than if you click the Close button.

Summary Tab - How Markups Are Applied

As illustrated in the figure above, the Summary tab on the Markups form shows the computed markup costs for the folder or task currently selected in the tree or sheet panel.

The grid area summarizes the markups applied to each Direct Cost type in the estimate, beginning on the top row with Bare Direct Costs and proceeding down to Total Project Cost at the bottom.

- 1 Bare Direct Costs are the base costs recorded for a task, before any markups or adjustments.
- 2 Costs applied to Bare Direct Costs can include price adjustments and taxes. Added to bare costs, these markups equal the "full direct cost" for any task or folder; that is, the cost to the sub or prime contractor who performs the work.
- 3 Next, overhead, profit, and other contractor markups are applied for each contractor involved in the work. M32 allows you to define multiple levels of tiered contractors in an estimate. A subtotal line shows the Costs to the Prime Contractor.

Note: Subcontractors are listed by name unless all of the tasks below the selected item do not have the same subcontractor. In this case, a generic Subcontractors line is used to summarize all subcontractor markups.

- 4 The Prime Contractor's own markups are then shown, with the next line of subtotals being the Total Contract Cost or Cost to Owner.
- 5 Lastly, costs outside the contract, known as Owner Costs, are applied to result in the bottom line cost, referred to as the Project Cost.

Defining Markups and Adjustments

Defining markups and adjustments in M32 involves the following tasks:

Task	Description
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- 1 You choose the cost type fields used for markups on the Select Fields tab of the Project Summary Information dialog. These fields can include predefined cost types that M32 computes in specific ways, or cost types that you define.

Refer to Chapter 4 for more information on the Project Summary Information dialog and the cost types.

- 2 In the case of contractor markups, you add contractors in the Contractors primary view, and then assign tasks to them.

Refer to “Contractor Markups” in this chapter.

- 3 For non-contractor markups, you use the Markups form to define the actual cost amounts or percentages to apply as markups. In some cases you will define markups that apply to the estimate as a whole. In other cases, you will want to define specific markups that apply only to a certain task or folder.

Caution on Applying Markups to Folders

If you apply markups to a folder and later add more tasks to that folder, your markups will not be automatically applied to the new tasks. You must manually reapply the markups. You can run the Markups report to see which markups are applied to specific tasks.

Overtime

Overtime adjustments are typically applied to the Labor (and sometimes EquipmentDirect cost types. They are applied before all other markups.

You define Overtime adjustments on the Overtime tab.

The screenshot displays the 'Markups for CHILD DEVELOPMENT CENTER' window. The 'Overtime' tab is selected, showing a table with columns 'Count', 'Overtime Category', and 'Percent'. Below this is an 'Overtime' section with a table for 'Day', 'Working?', and 'Paid At'. To the right is a 'Shift Definitions' section with a table for 'Shift', 'Working?', and 'Hours'. Below these are 'Std Work Day' (8 hours) and 'Std Work Week' (5 days) fields. At the bottom, there is a 'Task Count' field showing '34' and buttons for 'Back', 'Next', 'Apply', and 'Close'.


Effects on Labor and Equipment Costs

When you apply an Overtime adjustment, M32 marks up the Labor costs for all affected tasks by that percentage. Equipment costs are affected only if you are using the U.S. Army Corps of Engineers equipment cost calculations as displayed on the equipment form (See Chapter 7). In this case, the Ownership (FCCM) portion of the equipment cost for each task is *reduced* by the percentage shown in the Equip FCCM % field on the Overtime tab.

Overtime Categories

M32 uses data that you enter on the Overtime tab to create Overtime *categories*. These categories define the amount of overtime worked and the overtime differentials to be applied. Based on this data, M32 computes an overtime percentage adjustment to be applied to all Labor costs (and an Equipment FCCM percentage to be applied to Equipment costs) when this Overtime category is applied.

Field Descriptions

Overtime Categories Area	The grid area in the upper left part of the tab shows all of the Overtime categories that have been defined for this estimate. The currently selected category is shown by the  icon
Count	Number of tasks under the currently selected folder that use this Overtime category. These tasks are displayed in the tasks grid, below.
Overtime Category	Description of the Overtime category
Percent	Percentage added to labor costs by this Overtime category.
Configuration Area	The area in the upper right shows the values used to compute the Overtime percentage for the currently selected Overtime category
Days Grid	The days included in the workweek and the amount of Overtime adjustment for each day
Shifts Grid	The shifts worked and the number of hours in each shift
Hours per Day	Total hours per day (the sum of the hours for the specified shifts)
Equipment FCCM %	Percentage by which the Ownership component of Equipment costs will be reduced (when using the U.S. Army Corps of Engineers method of computing Equipment costs)
Standard Work Day	Number of hours in a standard work day. That is, the number of hours per day paid at the standard, non-overtime rate.
Standard Work Week	Number of days in a standard week. That is, the number of days per week paid at the standard, non-overtime rate.
Tasks Grid	The grid area at the bottom of the tab shows all tasks below the currently selected folder to which the selected Overtime category is currently applied. The tasks are shown with their parent folders and the associated Tags.

Actions

You can take the following actions from the Overtime tab:

- To apply the selected Overtime category to the current task or all tasks under the currently selected folder, click the Apply or Close buttons.
- To change the way Overtime is computed for the selected category, change the values in the Configuration area and click Apply or Close. This updates Overtime adjustments for all tasks to which this category has been applied.
- To add an Overtime category, click the blank Overtime Category field. Enter a name in the Overtime Category field and then click another field on the grid. You can then select values in the Configuration area. To apply the Overtime percentage to the current folder or task, click apply. To exit without applying, click Close.

Example - Adding Overtime to Part of an Estimate

In this example, you need to define an Overtime category and apply it to all Roofing tasks in your estimate.

- 1 In the tree panel, highlight the folder for Roofing.
- 2 Choose View > Form > for Markups.

The Markups form is displayed.

- 3 Click the Overtime tab.
- 4 Click on the first blank row in the Overtime Categories area. Type “Overtime” in the Overtime Category field and then click on another field in the same grid.

M32 enters 0.00% in the Percent field. You can now access the Configuration area for the new category.

5 Enter the following information in the Configuration area

- | | |
|----------------|--|
| Day Working | Select all |
| Paid At | Enter 2.0 for Sunday and 1.5 for all other days. |
| Shifts Working | Select #1 and #2 |
| Shifts Hours | Enter 8.0 for #1 and 7.5 for #2 |

Note: Do not change the other default values.

M32 computes the Hours per Day as 15 and computes the overtime percentage as 25.35%. It places this value in the Percent field in the Categories area. It also computes an Equipment FCCM percentage of - 63.13%.

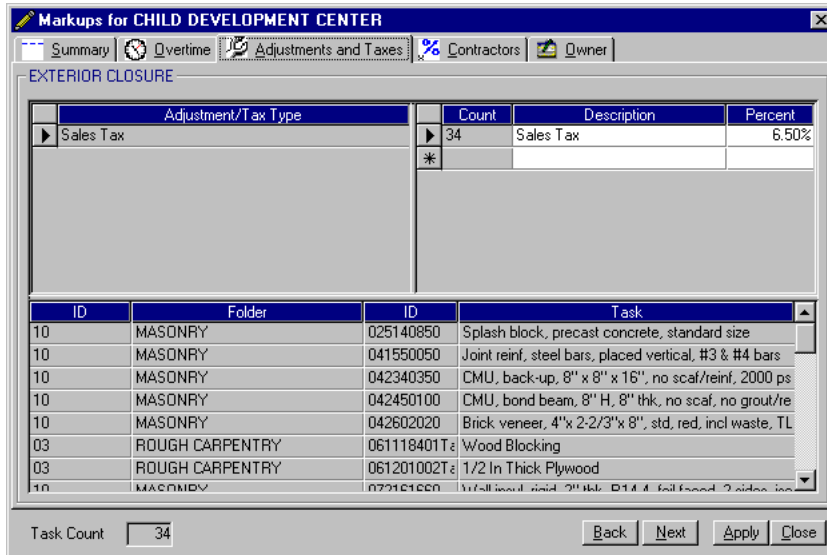
6 Click the Apply button.

M32 applies an Overtime markup of 25.35% to the labor costs of all tasks under the Roofing folder. If you are using the Corps of Engineers' equipment cost computations, M32 also reduces the Ownership component of the equipment by 63.13%.


Adjustments and Taxes

Cost adjustments are any percentage markups that you may wish to apply to a task or folder in an estimate. Taxes normally represent sales tax on material and are applied to the Material Direct Cost type . Both adjustments and taxes are applied after any Overtime percentages and before contractor markups.

You define information for these markups on the Adjustments and Taxes tab.



Adjustment/Tax Type

This area in the upper left part of the tab shows all of the adjustment and tax markups defined for the estimate. These are the same as the Adjustment/Taxes types selected on the Project Summary Information dialog, Select Fields tab. The currently selected type is shown by the  icon

Definition Grid

The grid area in the upper right shows the values for the currently selected adjustment or tax.

Count

Number of tasks under the currently selected folder that have this adjustment applied. These tasks are displayed in the tasks grid, below.

Description

Description of the adjustment, (typically includes the percentage added or deducted and why).

Percent

Actual numeric percentage of the adjustment

Tasks Grid

The grid area at the bottom of the tab shows all the tasks under the currently-selected folder to which the selected tax or adjustment is applied. The tasks are shown with their parent folders and associated Tags.

Actions

You can take the following actions from the Adjustments and Taxes tab:

- To apply the selected tax or adjustment to the current task (or all tasks under the currently-selected folder) click the Apply button.
- To change the way the tax or adjustment is computed, change the values in the Definition Grid and click Apply. This updates the markup for all tasks in the estimate to which this tax or adjustment has been applied.

Example - Defining Sales Tax for Materials

In this example, you need to define a 5.5% sales tax for all materials in your estimate. The example assumes you have selected a Direct Cost type of Material and an Adjustments/Taxes type of Sales Tax on the Select Fields tab of the Project Summary Information dialog.

- 1 Highlight the top level folder for your estimate.
- 2 Choose View > Form > for Markups.

The Markups form is displayed.
- 3 Click the Adjustments and Taxes tab.
- 4 In the Adjustments/Tax Type area, click to select Sales Tax (if it is not already selected).
- 5 Enter the following information:

Description	5.5% Sales Tax on Material
Percent	5.5%

- 6 Click the Apply button.

M32 applies the tax . All Material costs in the estimate are increased by 5.5%.

Contractor Markups

M32 offers great flexibility in defining and applying contractor markups. Contractors' overhead, profit, and bond costs are figured individually for each contractor involved in the project. The software automatically calculates these costs according to any of a number of methods that you choose. You can apply markups for individual contractors to any folder or task at any level in the project hierarchy.

Contractor markups are typically applied to all Direct Cost types. They are applied after Overtime, taxes, and cost adjustments, but before Owner Cost markups.

Contractor Tiering

Prime and Subcontractors

In M32, a *prime contractor* is defined as one who does not work for another contractor. A *subcontractor* is one who does work for another contractor.

M32 allows you to have more than one prime contractor defined in the project. M32 also permits you to define multiple levels of subcontractors, as in the following example.

Level 1 - BC Building Construction (Prime Contractor)
 Level 2 - EL Electrical (Subcontractor)
 Level 3 - ES Electrical Specialties (Subcontractor)

In this example, Contractor ES works for Contractor EL, who in turn works for Contractor BC. BC is a prime contractor, because he does not work for any other contractor. BC is also considered the *parent contractor* to his subcontractor EL. Similarly, EL is considered the parent contractor to his sub, ES.

Compounded Cost Markups

When M32 calculates the estimate, a subcontractor's cost markups are rolled in to the costs applied to the parent contractor.

In the above example, the costs for work performed by ES will be applied to EL with ES's markups included. Similarly, the costs for the same work will be applied to BC with both ES's and EL's markups included.

In other words, M32 *compounds the markups* of tiered contractors, as is common construction practice.

Task List for Working with Contractor Markups

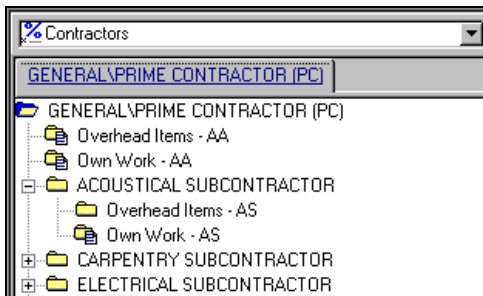
Working with contractor markups in an M32 estimate involves the following tasks:

Task	Description
1	You use the Project Summary Information dialog, Select Fields tab, to select the Contractor Markup cost types and the types of Direct Costs they apply to. <i>Refer to</i> Chapter 4 for information.
2	You add the contractors to the Project Database, using the Contractors primary view.
3	You apply the contractors markups to folders or individual tasks in the estimate. By doing so you assign the folders or tasks as work performed by that contractor.

Contractors Primary View

You use the Contractors primary view of the Project Database to add contractors and to view the hierarchy of contractors in your estimate. This view is automatically created with the Project Database. It contains only a default Prime Contractor folder and an Unassigned folder until you add contractors.

NOTE: Every contractor in the view is created with two subfolders, called Overhead and Own Work. These folders are explained below.



Defining Prime Contractors

You can use the default folder to define the first prime contractor in your estimate. If you have multiple prime contractors, you can add folders for them at the same level.

- 1 Select the default prime contractor folder in the tree panel.
- 2 To define information for the first prime contractor, click the right mouse button and choose Edit Folder from the context menu.

The Contractor form appears (see below).

- 4 Fill in the form with the contractor information.
- 5 Click Close to exit the form.

NOTE: To add another prime contractor at the same level, select the prime contractor folder in the tree panel and choose Insert > Folder. Then select the New Folder and repeat the procedure from Step 2.

Adding Subcontractors

You add subcontractors as folders below the prime contractor folder. The subcontractors are thus defined as “child” folders to the prime contractor. As explained under “Contractor Tiering,” above, you can define multiple levels of subcontractor folders representing “parent” and “child” contractors.

- 1 In the tree panel, select the folder for the parent contractor under which you want to define the subcontractor.
- 2 Choose Insert > Child Folder.

The New Folder appears in the tree panel.

- 3 Select the New Folder, click the right mouse button, and choose Edit Folder from the context menu.

The Contractor form appears (see below).

- 4 Fill in the form with the contractor information.
- 5 Click Close to exit.

Contractor Form

You use the Contractor form to add or edit information about a contractor.

Contractors for CHILD DEVELOPMENT CENTER

General | Profit ... | P I & I | Notes

Contractor Definition

Contractor ID: AA Quantity: 1.0 EA

Contractor Name: GENERAL\PRIME CONTRACTOR (PC)

Short Name: GENERAL\PRIME Folder Tag: AA

Project Contractor Summary

Markup	Method	Own %	Sub %	Amount
OVERHEAD	Compute Ovhd	6.69%	6.69%	\$175,219
HOME OFC	Running Pct	2.70%	2.70%	\$0
PROFIT	Compute Profit	6.30%	6.30%	\$0
BOND	Bond Class B	1.21%	1.21%	\$0
EXCISETX	Running Pct	1.50%	1.50%	\$0

Insert Lock Back Next Apply Close

General Tab

Contractor Definition

- Contractor ID** Required code you assign to identify this contractor. See “Suggested Contractor IDs”, below.
- Quantity/UOM** Optional. Quantity and unit of measure associated with this contractor’s work. Often, 1 LS (lump sum) is used. Actual quantities may also be used.
- By filling in this field you enable M32 to calculate a unit cost for all work done by this contractor independent of the unit costs of any particular task or folder.
- Contractor Name** Name of the contractor
- Short Name** Short version of the contractor name, as used on the tree panel
- Folder Tag** Optional tag or code associated with this contractor folder in the contractor hierarchy

Project Contractor Summary	The grid area shows the summary of cost markups for this contractor
Markup	The Contractor Cost fields selected for this estimate on the Project Summary Information dialog, Select Fields tab. Refer to Chapter 4 for information.
Method	The method used to compute the contractor's markup for each Cost field. See "Cost Methods" below for information.
Own%	Percentage markup for this Cost field applied to the Contractor's own work
Sub%	Percentage markup for this Cost field applied to the Contractor's subcontracted work
Amount	Amount of markup for this Cost field. Note: Depending on the Cost Method, either an Amount or Percentages may be used.

Cost Methods

M32 supports these methods of computing contractor markups. As indicated, certain methods are only available for certain of the predefined Contractor Cost fields.

- Direct Pct - M32 calculates the markup using the percentage you enter in the Own % field times the contractor's Direct Costs only. The same percentage is applied to the contractor's own and subbed work. This option is available for all Contractor Cost fields.
- Running Pct - M32 calculates the markup based on the percentage you enter in the Own % field times the *running total*. (The running total is the total of the contractor's Direct Costs plus the values of any Cost fields appearing above the present row in the grid.) The same percentage is applied to the contractor's own and subbed work. This option is available for all Contractor Cost fields.
- Separate Pct - M32 calculates the separate markups for the contractor's own work and subbed work, using the two separate percentages that you enter in the following fields. This option is available only for the Overhead and Profit Cost fields.
- Amount - Add the amount that you enter in the Amount field. This option is available for all Contractor Cost fields.
- Compute Overhead - Choose this option when you want to estimate the contractor's overhead using tasks that you enter specifically for this contractor. See "Working With Overhead Tasks," below. This option is available for the Overhead Cost field only.

- Compute Profit - Choose this option when you want to compute the contractor's profit using the Profit Weighted Guidelines table. See "Profit Tab," below, for information. This option is available for the Profit Cost field only.
- Bond Class Options - Choose these options when you want M32 to compute a bond markup amount using a predefined Bond table and Bond Classes, which are maintained by the M32 Administrator. These options are available for the Bond Cost field only.

Note: Administrators maintain the Bond Table using the M32 Administrator Module. If you are an administrator, see Appendix A..

Suggested Contractor IDs

Following is a list of recommended contractor IDs for common types of contractors:

AA – Prime Contractor	MR – Membrane Roofing
AB – Alternate Prime	PA – Partitions
AC – Acoustic Treatment	PC - Precast Concrete
CA - Carpeting	PL - Plumbing
CO - CO2 Fire Protection System	PR - Preform Roofing, Siding
CS - Special Coating	PS - Painting and Sealants
CW - Cabinet and Casework	RF - Resilient Flooring
EL - Electrical	SC - Ceiling Suspension Systems
ES - Special Electrical Systems	SD - Special Doors
EV - Elevators	SF - Special Flooring
FP - Fire Protection	SM - Sheetmetal
FS - Food Service Equipment	SR - Shingles, Roofing Tiles
FU - Furnishings	SS - Structural Steel
GL - Glass and Glazing	ST - Soil Treatment
GW - Gypsum Wallboard	SW - Sitework
HA - Halon Fire Protection System	TB - Test and Balance
HC - Hoist and Cranes	TE - Terrazzo
HV - HVAC	TF - Pile, Foundations
IN - Insulation	TI - Tileproof, Waterproof
LP - Lath, Plaster, Stucco	WC - Wall Covering
MA – Masonry	WD - Windows
MB – Prefab Metal Buildings	WF - Wood Flooring
MC – Controls	WP - Dampproof, Waterproof
ME – Mechanical	WW - Entrances, Windowwalls
MI – Instrumentation	

Working With Overhead Tasks

When you choose Compute Overhead as the cost method for the Overhead cost field, M32 will compute the Overhead amount by totaling the costs contained in overhead tasks, which you enter for the contractor. Like other tasks in the estimate, these tasks may include crews, assemblies, labor, and equipment, as well as CSI tasks.

You enter these tasks in the Contractor primary view, under the sub-folder called Overhead Items, which is automatically created when you add each contractor. You can add as many levels of folders under the Overhead Items folder as you wish.

To enter Overhead costs for a contractor do any of the following

- Drag tasks from a CostBook, Assemblies, or another Project Database and drop them on the Overhead Items folder
- Drag and Drop folders from other Project Databases onto the Overhead Items folder
- Insert tasks directly under the Overhead Items folder
- Insert folders under the Overhead Items folder, and then add tasks under those folders

NOTE: Computed Overhead tasks appear at the beginning of the Detail Report.

Profit Tab

Use this tab to estimate the contractor's markup for profit using a profit weighted guidelines table. This table is provided as part of M32's support for U.S. Department of Defense estimating procedures.

To use the table, you enter a decimal value for each factor listed. M32 multiplies these values by the weights assigned to each factor to yield a profit percentage for that factor. These individual profit percentages are totaled at the bottom of the screen, and the sum is the profit percentage applied for the contractor.

NOTE: The weights listed for each factor can be adjusted by your System Administrator through the Settings tab on the Administrator Options dialog.

The following guidelines for each weighting factor are copied from the Engineer Federal Acquisition Regulation Supplement (EFARS).

Risk	Degree of risk. Where the work involves no risk or the degree of risk is very small, the weighting should be .03; as the degree of risk increases, the weighting should be increased up to a maximum of .12. Lump sum items will have, generally, a higher weighted value than unit price items for which quantities are provided. Other things to consider: the portion of the work to be done by subcontractors, nature of work, where work is to be performed, reasonableness of negotiated costs, amount of labor included in costs, whether the negotiation is before or after performance of work, etc.
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Difficulty	Relative difficulty of work. If the work is most difficult and complex, the weighting should be .12 and should be proportionately reduced to .03 on the simplest of jobs. This factor is tied in to some extent with the degree of risk. Some things to consider: the nature of the work, by whom it is to be done, where, what is the time schedule, etc.
Size	Size of job. All work not in excess of \$100,000 shall be weighted at .12. Work estimated at between \$100,000 and \$5,000,000 shall be proportionately weighted from .12 to .05. Work from \$5,000,000 to \$10,000,000 shall be weighted at .04, and work in excess of \$10,000,000 at .03.
Period	Periods of performance. Jobs in excess of 24 months are to be weighted at .12. Jobs of lesser duration are to be proportionately weighted to a minimum of .03 for jobs not to exceed 30 days.
Contractors Investment	To be weighted from .03 to .12 on the basis of below average, average, and above average. Things to consider: amount of subcontracting, mobilization payment item, Government-furnished property, method of making progress payments, etc.
Assistance	Assistance by Government. To be weighted from .12 to .03 on the basis of average to above average. Things to consider: use of Government-owned property, equipment and facilities; expediting assistance, etc.
Subcontracting	To be weighted inversely proportional to the amount of subcontracting. Where 80% or more of the work is to be subcontracted, the weighting is to be .03 and such weighting proportionately increased to .12 where all work is performed by the contractor's own forces.

PT&I Tab

Use the PT&I tab to calculate a percentage to mark up the contractor's labor costs to account for payroll taxes and insurance. This percentage is applied to all labor costs assigned to the contractor and is used to determine the value of the PTI Contractor Cost field.

FICA (SS tax)	Percentage to markup the contractor's labor costs for FICA
Unemployment / Federal	Percentage markup for Federal Unemployment insurance
Unemployment / Federal	Percentage markup for State Unemployment insurance
Workmen's Compensation	Percentage markup for Workmen's Compensation insurance
Total Payroll Taxes and Insurance	Total markup. Equals the sum of the preceding fields.

Contractor's Own Work Folder

The Own Work folder is automatically created for each contractor that you add. This folder shows the hierarchy of subfolders and tasks representing work performed by this contractor (as opposed to subcontractors). This folder is empty until you assign work to the contractor.

Assigning Work to a Contractor

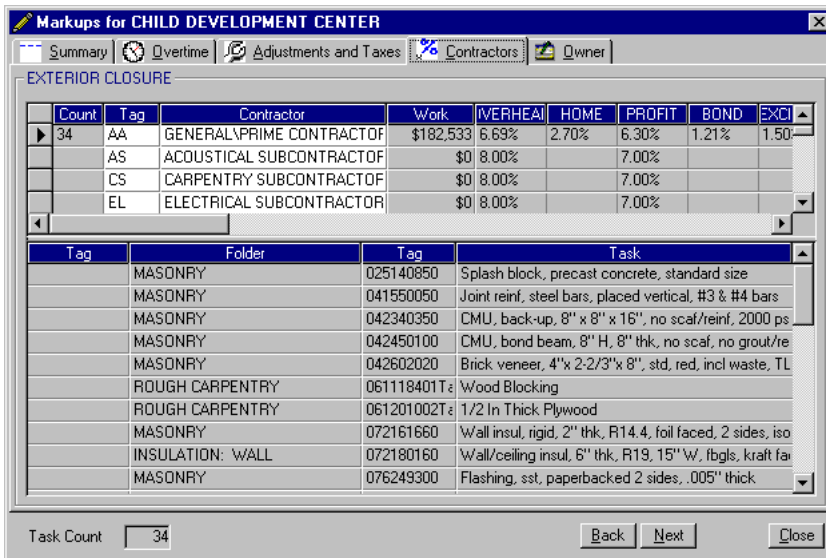
When you assign work to a contractor, M32 applies the defined markups for that contractor to the costs of the work. You can assign work to a contractor using several methods.


- You can drag tasks or folders from another primary view of the project to the Contractors view and then drop them on the Contractor's Own Work folder. This is the easiest and recommended method.
- For individual tasks, you can use the Accounts tab of the task form to select the contractor.
- For individual tasks, you can type the Contractor ID in the sheet panel.

Result: After you have assigned a task or folder to a contractor, you can select that task or folder in the sheet panel and then view the contractor markups on the Contractors tab of the Markups form.

Contractors Tab, Markups Form

You use the Contractors tab on the Markups form to view the contractor markups for a particular project folder or task. Unlike the other tabs on the form, you can view markups here but not change them.



Contractors grid The grid in the upper part of the tab shows all of the contractors defined for the estimate, along with the following information. The currently selected contractor is shown by the  icon

Count Number of tasks under the current folder that this contractor is currently responsible for

Tag Code or database ID used to identify this contractor in the database

Contractor Name of the contractor

Work	Total costs of all tasks within the current folder assigned to this contractor. (These are the Direct Costs to the contractor, including Overtime, adjustments, and taxes, as well as the markups of any subcontractors to this contractor.)
Contractor Cost Fields	The following fields in the grid are the Contractor Cost fields defined for this estimate. Each field shows the current markup percentage or amount as defined for this contractor. (These values are defined in the Contractors primary view, using the Contractor form.)
Tier	The position of this contractor in the contractor hierarchy. Prime indicates a prime contractor. Other values are 1st tier sub, 2nd tier sub, etc.
Own Work	Amount of the Work figure representing this contractor's own work
Subbed Work	Amount of the Work figure representing work that this contractor subcontracts
Tasks Grid	This grid on the tab shows all tasks under the current folder to which the selected contractor is currently applied. The tasks are shown with their parent folders and associated Tags.

Owner Markups

In M32, Owner markups are used to estimate costs to the project owner outside of construction contracts. They are applied after all other markups. Owner markups may include escalation, contingency, supervisory costs, and so on. Like other markups, they are distributed over all or part of a project.

Some Owner markups, such as Escalation, are normally defined at the top-level folder and thereby applied to the entire estimate. Others, such as Contingency markups, may be applied only to certain folders or tasks. The recommended procedure is to apply the top-level markups first and then to apply any additions or exceptions at the lower level folders or tasks.

You define Owner markups on the Owner tab:

The screenshot shows the 'Markups for CHILD DEVELOPMENT CENTER' dialog box with the 'Owner' tab selected. The 'EXTERIOR CLOSURE' folder is active. The 'Owner Markup Type' table is as follows:

Owner Markup Type	Count	Description	Method	Percent	Amount
▶ ESCALATION	34	ESCALATION	Compute Escal	4.36%	\$
CONTINGENCY	*				
SIOH					

Below this table is a list of tasks:

ID	Folder	ID	Task
10	MASONRY	025140850	Splash block, precast concrete, standard size
10	MASONRY	041550050	Joint reinf, steel bars, placed vertical, #3 & #4 bars
10	MASONRY	042340350	CMU, back-up, 8" x 8" x 16", no scaf/reinf, 2000 ps
10	MASONRY	042450100	CMU, bond beam, 8" H, 8" thk, no scaf, no grout/re
10	MASONRY	042602020	Brick veneer, 4"x 2-2/3"x 8", std, red, incl waste, TL
03	ROUGH CARPENTRY	061118401T	Wood Blocking
03	ROUGH CARPENTRY	061201002T	1/2 In Thick Plywood


At the bottom, the 'ESCALATION' settings are: Start Date 01/01/1996, Index 1934, End Date 07/01/1997, Index 2081. The 'Task Count' is 34. Buttons for Back, Next, Apply, and Close are visible.

Owner Markup Type

This area in the upper left part of the tab shows all of the Owner Cost types defined for the estimate on the Select Fields tab of the Project Summary Information dialog.

The currently selected type is shown by the  icon.

For More Information on the Owner Cost fields, see Chapter 4.

Definition Grid The rows in this grid (in the upper right of the tab) shows all of the markups defined in the estimate for the currently selected Owner Cost type. For example, if three different Contingency markup percentages are defined for three different areas of the estimate, all three are shown in the grid. The currently selected markup is shown by the selection icon .

- Count Number of tasks under the currently selected folder to which this Owner markup is applied
 - Description Description of the markup. Typically includes the percentage added or deducted and the Owner Cost field.
 - Method Method used to compute the Owner markup. See “Cost Methods” below for information.
 - Percent Actual markup percentage applied. Depending on the Method, you may enter the percentage here or M32 may compute it.
 - Amount Amount of markup for this Cost field.
- Note:** Depending on the Method, either an Amount or Percentages may be used.

Tasks Grid This grid area on the lower part of the tab shows all tasks under the current folder to which the selected Owner markup is applied. The tasks are shown with their parent folders and the associated Tags.

**Escalation
Fields**

These fields appear at the bottom of the tab when you select Compute Escalation as the Method for the predefined Escalation Cost field. You enter Escalation table values that M32 then uses to compute an escalation percentage to apply as the markup. Escalation tables are available from a number of industry and government sources, such as:

- R.S. Means Company
- Engineering News Record
- F.W. Dodge
- U.S. Government Office of Management and Budget
- U.S. Army Corps of Engineers (Form AR 415-17)

Note: The Date of the Escalation Schedule is printed in the Project Settings Report and the Markups Report. See Chapter 9 for more information on Reports.

Start Date	Date represented by the Index in the next field.
Index	Index at which to begin calculating Escalation costs.
End Date	Date represented by the Index in the next field.
Index	Index at which to end calculation of Escalation.

The End Index is divided by the Start Index to compute an escalation factor representing the relative cost change between the two indexes. This factor (minus one) is then applied as a running percentage to yield the percentage value for the Escalation field.

Methods

M32 supports these methods of computing Owner markups. As indicated, certain methods are only available for certain of the predefined Owner Cost fields.

- Direct Pct - M32 calculates the markup using the percentage you enter in the Percent field times the total contract costs only (that is, total Direct plus all markups up to the "Cost to Owner" row as shown on the Summary tab). M32 excludes other Owner Costs from the computation. This option is available for all Owner Cost fields.
- Running Pct - M32 calculates the markup using the percentage you enter in the Percent field times the *running total*. The running total is the total of all Direct Costs and markups *including* any Owner markups listed above this one on the Summary tab. This option is available for all Owner Cost fields.
- Amount - M32 adds the amount you enter in the Amount field. This option is available for all Owner Cost fields.
- Compute Escalation - M32 computes the percentage based on Escalation data that you enter on the bottom of the tab. Available only for the Escalation Cost field.

Actions

You can take the following actions on the Owner tab:

- To apply an Owner markup to the current folder or task, select the Owner Markup type, select a row in the Definition grid, then click the Apply button.
- To add a new markup percentage or amount, first select the Owner Markup type, then click a blank row in the Definition grid and enter a Description, Method, and Percentage or Amount.
- To change information about an Owner markup, select the markup and change the data in the Definition Grid.

Example - Defining a Contingency Percentage

In this example, you need to define a 6% Contingency for the Sitework in an estimate. You want this markup applied after Escalation. You have already defined Escalation and Contingency as Owner markup types on the Select Fields tab of the Summary Information dialog. (Contingency is entered as a User-Defined Owner field.)

- 1 In the tree panel, highlight the Sitework folder.
- 2 Choose View > Form > for Markups.

The Markups form is displayed.

- 3 Click the Owner tab.
- 4 Click to select the Contingency type in the Owner Markup Type grid.
- 5 Click in the Definition grid and enter the following information:

Description	6% Contingency for Sitework
Method	Running Percentage
Percent	6%

- 6 Click the Apply button.

M32 applies the 6% Contingency percentage to all Sitework tasks. The markup is applied to Escalated contract costs for the work.

