

Quantity Override column lets you enter the actual quantity you will have to order.

This layout shows just 11 of the over 70 columns of data you can choose from.

Part No.	Description	Req. Qty.	Qty. Override	Unit	Unit Mat. Cost	Mat. Cost	Unit Shop Labor Hour	Field Labor Hour	Total Labor Cost	Total Cost
<b>Ducts</b>										
	Duct, Rectangular, Galvanized Steel, 15x11 in.	17	20	R	\$2.57	\$51.96	0.256	0.256	\$113.92	\$165.27
	Duct, Round, Flexible Duct, 7 in.	16.65	20	R	\$0.89	\$14.89	0.027	0.027	\$16.47	\$31.29
	Duct, Round, Flexible Duct, 8 in.	34.96	40	R	\$1.02	\$40.88	0.042	0.042	\$37.36	\$78.23
	Duct, Rectangular, Galvanized Steel, 13x8 in.	17	20	R	\$2.17	\$45.45	0.216	0.216	\$96.12	\$139.57
	Duct, Rectangular, Galvanized Steel, 12x8 in.	17	20	R	\$2.07	\$41.40	0.206	0.206	\$91.67	\$133.10
	Duct, Rectangular, Galvanized Steel, 10x7 in.	17	20	R	\$1.64	\$32.73	0.17	0.17	\$75.65	\$108.30
	<b>Subtotal - Ducts</b>					<b>\$227.71</b>			<b>\$431.21</b>	<b>\$558.91</b>
<b>Fittings</b>										
	Fitting, Rectangular takeoff at 90 degree, Duct Material = Galvanized Steel, 15x11 in.	1	0	ea	\$4.34	\$4.34	0.806	0.806	\$17.53	\$22.20
	Fitting, Round angled floor boot with transition, Duct Material = Flexible Duct, 7 in.	2	0	ea	\$1.79	\$3.57	0.073	0.073	\$3.25	\$6.82
	Fitting, Junction box for flex duct, Duct Material = Flexible Duct, 7 in.	1	0	ea	\$1.79	\$1.79	0.073	0.073	\$3.52	\$2.41
	Fitting, Round angled floor boot with transition, Duct Material = Flexible Duct, 8 in.	4	0	ea	\$2.04	\$8.12	0.084	0.084	\$7.49	\$15.64
	Fitting, Junction box for flex duct, Duct Material = Flexible Duct, 8 in.	1	0	ea	\$2.04	\$2.04	0.084	0.084	\$5.61	\$11.73
	<b>Subtotal - Fittings</b>					<b>\$24.00</b>			<b>\$35.89</b>	<b>\$59.89</b>
<b>Grilles and Registers</b>										
	Supply register, 12x4 in.	6	0	ea	7.50	\$45.00	0	0.191	\$15.47	\$56.50
	<b>Subtotal - Grilles and Registers</b>					<b>\$45.00</b>			<b>\$13.47</b>	<b>\$56.50</b>
	<b>Grand Total</b>					<b>\$294.74</b>			<b>\$480.56</b>	<b>\$775.30</b>

In-place editing of costs, labor hours, etc.

## BILL OF MATERIALS OVERVIEW

The Elite Software Bill of Materials program lets you create and fully customize any kind of bill of materials report you want, but its most attractive feature to the HVAC contractor is the automatic ductwork takeoff that it does from ducts you draw using Elite's Drawing Board and the Manual D Ductsize program. Bill of Materials gives you complete control over all aspects of the material and labor costs as well as the bill of materials appearance, where you can choose a layout that shows only certain columns of data and turns off all the rest. You can select which colors to use, how to group the parts, etc., and can save your custom layout options for use in future projects.

## DEMONSTRATION VERSION

A functional demonstration version of Bill of Materials can be downloaded free of charge from Elite's internet web site, [www.elitesoft.com](http://www.elitesoft.com). Bill of Materials is an application program contained within Elite's Rhvac program. Downloading and installing the RHVAC demo program also provides demos of Drawing Board, Proposal Maker, and Bill of Materials.

Create one layout for on screen viewing and another for the printed report.

Save your layouts for use with future projects.

Choose from over 70 columns of available data for your own custom layouts.

Set the grid colors and other options.

Bill of Materials Window | Bill of Materials Report

Load/Save Layout

Load Layout... Save As...

Default Layout for New Projects:

Grid Colors

Section Heading: [Color]

Non-Editable Cell: [Color]

Additional Data: [Color]

Subtotal: [Color]

Grand Total: [Color]

Other

Show field labor correction factors

Show source objects

Show notes

Show Columns

Column Name Visible

- Material Cost & Price**
  - Unit Mat. List Price
  - Matl. Dealer Discount
  - Unit Mat. Cost
  - Matl. Margin
  - Matl. Markup
  - Unit Mat. Sale Price
  - Matl. Cost
- Weight/Gauge**
  - Unit Weight
  - Weight
  - Gauge
  - Weight per Area
  - Material Cost per Weight
  - Shop Labor Cost per Weight
  - Field Labor Cost per Weight
  - Total Labor Cost per Weight
  - Total Cost per Weight
- Area**
- Shop Labor**
- Field Labor**

OK Cancel Apply

## BILL OF MATERIALS FEATURES

- Provides Bill of Materials and Labor Estimate
- Automatically takes off ducts, fittings and registers from ductwork drawn with Drawing Board
- Allows manual entry of custom parts either as one-time parts for the current project or for the master material database
- Provided with a Database of Over 10,000 Parts
- Can Import Parts Data from Virtually Any Parts List
- Provides default ductwork prices based on duct material, gauge, and weight or area
- Use unit hours of shop labor and field labor for each item.
- Estimates Both Conventional & High Velocity 2" Duct
- Allows part assemblies and even nested assemblies
- Sales taxes on material and/or labor on a part by part basis.

## CALCULATION METHOD

The Bill of Materials program simply counts occurrences of each unique item it finds on a drawing done with Elite's Drawing Board and Manual D Ductsize software. The counts can be overridden by the user so that a reserve of certain items can be assured. For example, if Bill of Materials counted exactly 53 sheet metal screws of a certain size, the user could override that with a count of 100 to cover losses and waste. Bill of Materials maintains a database of parts with your actual cost and retail prices. These costs and prices can be maintained on a per item basis or on a per weight basis, or a per unit length basis. Prices can be overridden as needed for any given project.

## PROGRAM INPUT

In its most minimal form, Bill of Materials can be used just with Elite's Rhvac program. At this level, the software requires you to manually select material items and enter the desired quantities. In its most powerful form, you would use Bill of Materials in conjunction with Rhvac, Drawing Board, and Manual D Ductsize. In this way you would have a drawing of a floor plan with a complete duct system. Bill of Materials would then be able to automatically recognize and count all the duct components and registers. You would only need to manually enter a few other non-graphic items like maybe a special thermostat that doesn't show on the drawing. So when used with Rhvac, Drawing Board, and Manual D Ductsize, the Bill of Materials window will already be filled out with all the ducts, fittings and registers including material and labor costs with suggested retail pricing. Then all you have to do is edit any of the cost and price data that you want to change for individual parts, and add any additional parts you want to include. You can select your additional parts from your user-defined database of parts or you can enter a one-time part for the current bill of materials without having to add the new part to the database.

## SYSTEM REQUIREMENTS

Bill of Materials requires a computer system with at least Windows 2000 or higher. Works fine with Vista and Windows 7. Additionally, a full copy of Elite's Rhvac program is required at a minimum. And for best use of Bill of Materials, Rhvac, Drawing Board, and Manual D Ductsize provide the most automated form of material and labor cost estimating.

Sample DB MJ8.rhv - Rhvac - [Bill of Materials]

File Edit Bill of Materials - General Bill of Materials - Current Project Room Action Tools Window Help

Parts Database Layout Refresh Section Part Source Outline

Quantity Override column lets you enter the actual quantity you will have to order.

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	Duct, Round, Flexible Duct, 7 in	16.03	20	ft	\$0.89	\$17.87	0.037	0.037	\$16.47	\$34.33
	Duct, Round, Flexible Duct, 8 in	34.86	40	ft	\$1.02	\$40.84	0.042	0.042	\$37.38	\$78.22
	Duct, Rectangular, Galvanized Steel, 13x9 in	17	20	ft	\$2.17	\$43.45	0.216	0.216	\$96.12	\$139.57
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In-place editing of costs, labor hours, etc.

T:\Work\RhvacMJ8\Projects\Ship\Sample DB MJ8.rhv Modified

The "Go to Source Object" menu lets you zoom to any of the ducts on the drawing that the part is based on. Also works for fittings, registers and grilles.

Description	Req. Qty.	Qty. Unit
<b>Ducts</b>		
Duct, Rectangular, Galvanized Steel, 15x11 in	17	ft
Duct, Round, Flexible Duct, 7 in	16.03	ft
Duct, Round, Flexible Duct, 8 in	34.86	ft
Duct, Rectangular, Galvanized Steel, 13x9 in	17	ft
Duct, Rectangular, Galvanized Steel, 12x9 in	17	ft
Duct, Rectangular, Galvanized Steel, 10x7 in	17	ft
<b>Subtotal - Ducts</b>		
<b>Fittings</b>		
Fitting, Rectangular takeoff at 90 degrees, Duct Material = Galvanized Steel, 15x11 in	1	ea
Fitting, Round angled floor boot with transition, Duct Material = Flexible Duct, 7 in	2	ea
Fitting, Junction box for flex duct, Duct Material = Flexible Duct, 7 in	1	ea
Fitting, Round angled floor boot with transition, Duct Material = Flexible Duct, 8 in	4	ea
Fitting, Junction box for flex duct, Duct Material = Flexible Duct, 8 in	3	ea

- Edit Database
- Layout
- Refresh
- Section
- Part
- Go to Source Object
  - Duct SR-120
  - Duct SR-140
  - Duct SR-160
  - Duct SR-170
- Outline