

Outperform the Competition!

Departmentalization: Yes No

To learn more about how you can departmentalize your company, read our white paper at www.hvacls.com/departmentalization.

5 KPI's:

1. Revenue per Employee

	Bronze	Silver	Gold	Action Plan:		
$\frac{\text{Total Revenue}}{\text{\# Employees}} =$ (Excluding Comfort Advisors)	\$150,000 to \$130,000	\$170,000 to \$150,000	\$170,000+	Action Item	Person Responsible	Date
Opportunity / Issues	<ul style="list-style-type: none"> Lack of Company Culture Inefficient Operations Ineffective Operations Overstaffed 	<ul style="list-style-type: none"> Marketing Sales Focus Ineffective Operations Overstaffed 	<ul style="list-style-type: none"> Overworked Employees Missed Opportunities 			
Solutions / Recommendations	<ul style="list-style-type: none"> CAP Business Coaching DNA Lite Marketing Programs 	<ul style="list-style-type: none"> CAP Lennox Social Media Business Coaching DNA Lite 	<ul style="list-style-type: none"> Business Coaching Recruiting Business Systems 			

2. Retail Sales

	Bronze	Silver	Gold	Action Plan:		
$\text{One Comfort Advisor} =$	Less Than \$1.2M	\$1.2M	\$1.2M+	Action Item	Person Responsible	Date
Opportunity / Issues	<ul style="list-style-type: none"> Lack of Sales Process Making Assumptions about Customers 	<ul style="list-style-type: none"> Not Offering Financing Not Managing Leads to Final Disposition Too few Self Gen. Leads 	<ul style="list-style-type: none"> Need Another Sales Person Not Working All Sales Leads Too Many Calls/Day 			
Solutions / Recommendations	<ul style="list-style-type: none"> Load Calculations Sales Training Process Consumer Proposal System Selling Company Story 	<ul style="list-style-type: none"> Service Financing Bundling Accessories CAP Adv. Sales Training I.A.Q. 	<ul style="list-style-type: none"> Sales Mgmt. Training I.A.Q. Business Coaching Whole House Solutions 			

3. Demand Services

	Bronze	Silver	Gold	Action Plan:		
$\text{Demand Service Vehicle} =$	\$250,000 to \$200,000	\$275,000 to \$250,000	\$275,000+	Action Item	Person Responsible	Date
Opportunity / Issues	<ul style="list-style-type: none"> Low Pricing High Callback Too Few First-Time Completes No-charge Calls 	<ul style="list-style-type: none"> Operational Inefficiencies Dispatcher has Average Skills Too Much Time Spent on Jobsite 	<ul style="list-style-type: none"> Understand Replace vs. Repair Overworked Employees Too many Calls/Day 			
Solutions / Recommendations	<ul style="list-style-type: none"> Tech Needs Assessment Technical Training Service Pricing eCourses 	<ul style="list-style-type: none"> Tech Utilization Maintenance Agreement Programs Service Sales Excellence Class Service Management eCourses Business Coaching 	<ul style="list-style-type: none"> Service Mgmt. eCourses Technician Recruiting Business Coaching Technician Uses Lennox Pro 			

4. Installation Revenue

	Bronze	Silver	Gold	Action Plan:		
$\frac{\text{Total Installation Revenue}}{\text{\# Installers}} =$	\$450,000 to \$375,000	\$600,00 to \$450,000	\$600,000+	Action Item	Person Responsible	Date
Opportunity / Issues	<ul style="list-style-type: none"> No Processes Lack of Communications between Sales & Installation Extended Time Spent on Installs 	<ul style="list-style-type: none"> Proper Staffing of Crews during Busy Periods 	<ul style="list-style-type: none"> Congratulations Possible Capacity Issues 			
Solutions / Recommendations	<ul style="list-style-type: none"> Needs Assessment Technical Training Coaching Kitting 	<ul style="list-style-type: none"> Installers using Lennox Pros Business Coaching 	<ul style="list-style-type: none"> Service Mgmt. Training Integrated Operating Systems 			

5. # Maintenance Agreements

	Bronze	Silver	Gold	Action Plan:		
$\# \text{ Maintenance Agreements} =$	1,000 per \$1M	1,100 per \$1M	1,200 per \$1M	Action Item	Person Responsible	Date
Opportunity / Issues	<ul style="list-style-type: none"> Program Purpose Identified Lack of Processes Lack of Tech SPIFF Program 	<ul style="list-style-type: none"> Optimal Mktg Touches Wi-Fi / S30 Thermostat 	<ul style="list-style-type: none"> Proper Pricing Customer Touch Points 			
Solutions / Recommendations	<ul style="list-style-type: none"> Maintenance Agreement Program Management Training Culture Change 	<ul style="list-style-type: none"> Service Sales Excellence Class Service Manager Training iComfort Portal Screen 	<ul style="list-style-type: none"> Maintenance Agreement Program eCourses iComfort Portal Screen 			

For additional information on the performance of your company's KPI's, review the online DNA Lite at www.hvacls.com/dna.

DEPARTMENTALIZATION



Departmentalization is grouping by functions performed, or placing employees with shared skills and knowledge into departments. *It works best with 10 or more employees.* It can also be used in grouping products, customers, geographic locations, etc.

Installation and Service should be different departments in a company. When *departmentalized*:

- The Income Statement tracks both Revenue and Cost of Sales by department.
- A *departmentalized* Income Statement gives valuable information to help evaluate the performance of each of these business segments.
- It allows you to compare each business segment to industry Key Performance Indicators (Benchmarking).
- It allows detailed evaluation of each department or market segment.
- It ensures 100% accountability.
- It also allows you to evaluate department head performance and even allows you to tie compensation to that performance.
- It aids in the budgeting and forecasting practices
- It is a tremendous aid in setting prices

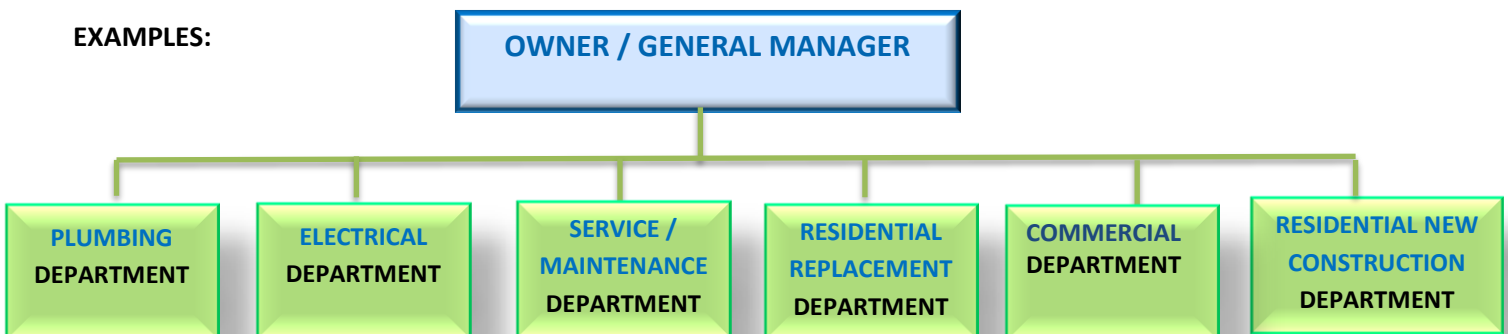
Departmentalization also allows you to be aware of your business mix in terms of Gross Profit as well as Revenue. This is valuable information for management to evaluate and improve a company's financial performance.

Business Mix Sample:

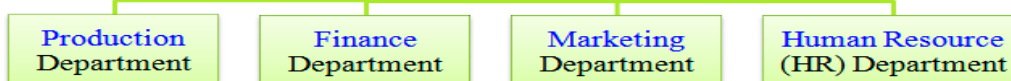
	Total Company		Res. Repl.		Res. Service		Res. Maint.	
Sales	\$83,000	100%	\$58,000	70%	\$20,000	24%	\$5,000	6%

Revenue by business segment without the corresponding Cost of Sales is not departmentalization.

EXAMPLES:



Functional Departmentalization



JOB COSTING

The process of tracking the expenses incurred on a **job** against the revenue produced by that job. It is an important tool for those who are pairing a relatively high dollar volume per customer with a relatively low number of customers.

- Job costing collects the Cost of Sales for the indigent visual jobs to determine gross profit for the job.
 - Important for business segments like Residential New Construction to be able to manage job.
 - Job costing is not enough if you want to financially manage your company.

	TOTAL COMPANY	
SALES	\$83,000	100.0%
TOTAL COST OF SALES	\$60,009	72.3%
GROSS MARGIN	\$22,991	27.7%
TOTAL OVERHEAD	\$23,240	28.0%
OPERATING PROFIT	(\$249)	-0.3%

Look at the following simple Income Statement. The company is losing money. Where is the problem? Overhead should be 28% or less of sales, so the Overhead looks okay.

- Is the problem in Residential Service?
- Is it in Residential Replacement?
- Or is the problem in another business segment?

Notice that all the sales have been lumped together. The same is true for the Cost of Sales. There's no way to analyze the business mix and there's not enough information to identify where the problems are. Other than being a tax document, this Income Statement format is useless. Look at the next Income Statement.

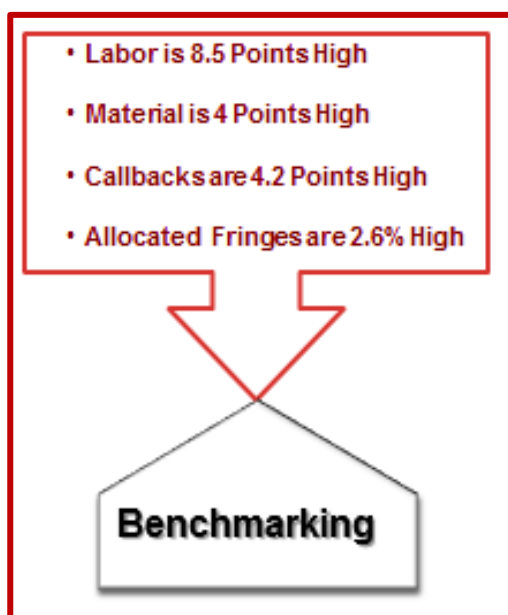
	TOTAL COMPANY	
SALES	\$83,000	100.0%
Parts & Material	\$10,873	13.1%
Direct Labor	\$14,442	17.4%
Equipment	\$19,920	24.0%
Sub-Contract	\$415	0.5%
Permits	\$581	0.7%
Callbacks	\$913	1.1%
Extended Warranty-3rd Party	\$996	1.2%
Promotions	\$498	0.6%
Warranty	\$2,656	3.2%
Allocated Fringes	\$4,150	5.0%
Sales Commissions	\$4,565	5.5%
TOTAL COST OF SALES	\$60,009	72.3%
GROSS MARGIN	\$22,991	27.7%
Marketing	\$4,150	5.0%
Employee Related	\$10,790	13.0%
Facility	\$2,490	3.0%
Vehicle Related	\$4,150	5.0%
Administration	\$1,660	2.0%
TOTAL OVERHEAD	\$23,240	28.0%
OPERATING PROFIT	(\$249)	-0.3%

The Chart of Accounts has expanded to identify Cost of Sales line items and Overhead line items. That's an improvement but there's still the problem of not identifying individual departments to see where the issues lie.

Here is an example of a *departmentalized* Income Statement down to Gross Margin. **Above the line** the statement shows information for individual departments as well as the company total. Notice how it shows sales, the Cost of Sales by line items and Gross Margins. Now there is enough information to manage individual department performance. For example, take a closer look at Service from the previous example.

	TOTAL COMPANY		Residential Repl.		Service	
SALES	\$83,000	100.0%	\$61,000	100.0%	\$22,000	100.0%
Parts & Material	\$10,873	13.1%	\$7,133	11.7%	\$3,740	17.0%
Direct Labor	\$14,442	17.4%	\$7,734	12.7%	\$6,708	30.5%
Equipment	\$19,920	24.0%	\$19,920	32.7%	\$0	0.0%
Sub-Contract	\$415	0.5%	\$415	0.7%	\$0	0.0%
Permits	\$581	0.7%	\$581	1.0%	\$0	0.0%
Callbacks	\$913	1.1%	\$0	0.0%	\$913	4.2%
Extended Warranty-3rd Part	\$996	1.2%	\$996	1.6%	\$0	0.0%
Promotions	\$498	0.6%	\$498	0.8%	\$0	0.0%
Warranty	\$2,656	3.2%	\$2,656	4.4%	\$0	0.0%
Allocated Fringes	\$4,150	5.0%	\$2,147	3.5%	\$2,003	9.1%
Sales Commissions	\$4,565	5.5%	\$4,076	6.7%	\$489	2.2%
TOTAL COST OF SALES	\$60,009	72.3%	\$46,156	75.7%	\$13,853	63.0%
GROSS MARGIN	\$22,991	27.7%	\$14,844	24.3%	\$8,147	37.0%
OVERHEAD	\$4,150	5.0%				
Employee Related	\$10,790	13.0%				
Facility	\$2,490	3.0%				
Vehicle Related	\$4,150	5.0%				
Administration	\$1,660	2.0%				
TOTAL OVERHEAD	\$23,240	28.0%				
OPERATING PROFIT	[\$249]	-0.3%				

The service department Gross Margin is too low. As you look at the individual expense line items, you will find:



	Service	
SALES	\$22,000	100.0%
Parts & Material	\$3,740	17.0%
Direct Labor	\$6,708	30.5%
Equipment	\$0	0.0%
Sub-Contract	\$0	0.0%
Permits	\$0	0.0%
Callbacks	\$913	4.2%
Extended Warranty-3rd Part	\$0	0.0%
Promotions	\$0	0.0%
Warranty	\$0	0.0%
Allocated Fringes	\$2,003	9.1%
Sales Commissions	\$489	2.2%
TOTAL COST OF SALES	\$13,853	63.0%
GROSS MARGIN	\$8,147	37.0%

Departmentalizing Overhead

Smaller companies generally do not need to *departmentalize* Overhead. But as a company gets bigger or does very much low Gross Margin work such as residential new construction, it's a good idea to *departmentalize* these Overhead costs to identify individual department profitability. It's always a good idea to do this for budgeting, if not for day to day accounting.

Look at the following example. Which department is doing the best? Why is the company Overhead so high? Why is EBIT so low?

	Total Company	Residential Replacement	Residential Service	Residential New Construction
Sales	1,000,000	500,000	100,000	400,000
Cost of Sales	590,000	240,000	50,000	300,000
Gross Profit	410,000	260,000	50,000	100,000
Overhead	380,000			
EBIT	30,000			

- Which department is doing the best?
- Why is overhead so high?
- Why is EBIT so low?

Allocating Overhead to the various departments helps owners analyze profitability. In this example we see the service department is actually losing money and Residential Replacement is just barely breaking even.

	Total Company	Residential Replacement	Residential Service	Residential New Construction
Sales	1,000,000	500,000	100,000	400,000
Cost of Sales	590,000	240,000	50,000	300,000
Gross Profit	410,000	260,000	50,000	100,000
Overhead	380,000	260,000	60,000	60,000
EBIT	30,000	0	-10,000	40,000

GETTING DEPARTMENTALIZED

A *departmentalized* Income Statement gives valuable information to evaluate performance in each business segment. Management can compare segment performance to industry KPI's (Benchmarking).



Common Departments Include:

Residential Replacement	Commercial Replacement
Residential Service	Commercial Service
Residential Maintenance	Commercial Maintenance
Residential New Construction	Commercial New Construction
Indoor Air Quality	Commercial Plumbing Service
Residential Plumbing Service	Commercial Plumbing New Construction
Residential Plumbing	Etc.
New Construction	

Tracking/Source Documents

You will need processes to track Revenue to the correct department, to track the direct Labor Cost to the correct department, and to track materials to the correct department.

For example, a Technician needs to identify the correct department on the Service Ticket for the work that's done and the Revenue that's collected. This can be done on a conventional Service Ticket where the office enters the information in the accounting system or via a mobile app where a Technician enters the information directly.

material is used on a job or service call, it's expensed at that time. In this case a material requisition is used to transfer the cost of the material from inventory to the cost of sales for the appropriate department. Here is an example of what happens on an installation.

1. The sales person identifies the equipment and materials needed for the job as part of the paperwork.
2. The warehouse person pulls the material for the job and notes the quantity used in the staging process.
3. When the job is completed, administration relieves inventory and enters it as a cost of sales to the residential replacement department. If the company has an inventory module with its software, the transaction occurs when the warehouse person identifies what materials were pulled for the job.

Getting Departmentalized Above The Line

- Decide what departments are important enough to be tracked in measured
- Meet with your management team and explain why it's important to be departmentalized, otherwise they may resist the change
- Set up your Chart of Accounts to define the Revenue accounts (department) and Cost of Sales (within QuickBooks this is done via a "class" function and "item lists")
- Create source documents to support departmental information flow
- Train office personnel on departmentalized bookkeeping entries, if applicable
- Train Technicians on what **departmentalization** is, why they need to fill out timesheets correctly, and why paperwork must be completed in a timely manner.
 - If you employ mobile apps, train the Techs on how to correctly enter information onto the system
- Begin entering data at the beginning of a new month
- Managers should collect all timesheets and service tickets during this transition so they can check for accuracy and provide immediate feedback and coaching as needed

Other considerations once you get departmentalized:

- Use the Income Statement to decide if you need to change your business mix
- Use the Income Statement to Benchmark the industry financial Key Performance Indicators
- Use the Income Statement to help analyze pricing
- Make sure your managers understand the income statement and can relate to the operational issues that drive the numbers
- Hold Managers accountable for their department Income Statement performance
- Process paperwork daily - when you do this, the month to date numbers are much more accurate; (all the information has to be entered anyway, so why not get it done daily instead of waiting until month end?)
- Get the Income Statement in a timely manner after months end - it should be available within ten business days after month end (five is better)
- Make sure Technicians and installers are diligent at recording time and materials (this includes identifying the correct department)
- Make sure administrative people are diligent in entering departmental information
- Utilize departmental information when you budget or in the forecasting process

DEPARTMENTALIZING FINANCIAL STATEMENTS

HVAC Business Departmentalization

Year One

Usually in the first year, a Residential HVAC business acquires:

- A Service Van
- Truck Stock/Inventory
- A bank account
 - Should be checked at the end of the week to see if the business made more than it spent
- A method of collecting payments
- Necessary marketing to stay in front of customers

Year Two

- The owner does everything right
- Maintenance business grows to 600 within two years
- Business has one full time CSR/Dispatcher
- Business has One Service technician
- Business has one Maintenance Specialist/Installer
- Business leases small office with room for basic stock and equipment deliveries

Creating Financial Structure to Manage Operations

- **Departmentalize** your Income Statement to monitor the various business segments
- Set up a Chart of Accounts to collect revenue
 - Set up all of the Cost of Sales line items for the business segments
- Use **departmentalized Income Statements** to decide if you need to change the business mix
- Use **departmentalized Income Statements** to compare to industry financial benchmarks (KPI's)
 - Where there are gaps, put together plans to improve financial performance
- Use **departmentalized Income Statements** to analyze pricing (determining breakeven, and desired gross profit dollars for Residential Replacement, etc.)



Guidelines for growth:

- Each Demand Service Technician should bring in a minimum of \$150k sales annually
- Each Maintenance Technician should bring in about \$80k sales annually
- Each Installation Technician should bring in a minimum of \$375k sales annually
- Each Comfort Advisor should bring in a minimum of \$1.2 Million sales annually

Considerations:

- Does your Income Statement allow you to benchmark to industry Key Performance Indicators?
 - Do the Cost of Sales line items match recommendations?
 - Is Income Statement *departmentalized* both for Revenue and Cost of Sales?

Hiring New Positions

Here is a basic formula to determine the additional sales needed to pay for a new position:

OVERHEAD \$

GROSS MARGIN % - DESIRED PROFIT % = SALES NEEDED

DEPARTMENTALIZATION – ALLOCATING OVERHEAD



The process of *departmentalizing Overhead* is called allocation. *Allocating Overhead* truly shows the profitability by department. It allows you to tie manager compensation directly to department EBIT performance. It also lets you know what business segments are profitable. It helps identify areas of business that need improvement or the company may need to exit from. In contrast, it helps identify areas of the business you may want to expand.

There are some disadvantages in *allocating Overhead*:

- Overhead expenses can be hard to distribute among departments fairly.
- The accounting is more complex, time-consuming and can be prone to mistakes.
- Reporting department performance down to the EBIT level can disrupt harmony and cause internal conflicts among department heads.
 - Some software can make allocating overhead much easier.
 - Excellent leadership skills are needed to resolve any internal conflicts.

Even if you choose not to *allocate overhead* in your day-to-day accounting, it's an excellent exercise to help understand company profitability and it's an essential step in budgeting. When budgeting, it's a good idea to meet with the Management Team to review the Chart of Accounts line items to decide how expenses will be allocated to the various departments.

There are several methods of allocating Overhead:

1. **Percentage of Sale Method** - Expenses allocated based on department Revenue.

Example: If the company does \$5 million in Revenue, and Service does \$1 million of that, then Service is allocated 20% of the Overhead expenses. ($\$1,000,000 \text{ divided } */ \$5,000,000 = 20\%$). It's a simple method; however, Overhead expenses do not track actual department Overhead support and are therefore not accurate.

- For example, Residential New Construction could be charged for expenses such as Marketing and Advertising, which it would never use; therefore, this method is not recommended. The exception could be for expenses such as credit card usage.

2. **Direct Allocation Method** – (A *preferred* method). It assigns Overhead to the specific department where the cost occurred.

Example: Vehicle expenses for an installation truck would hit the Residential Replacement department. Easily tracked types of Overhead expenses include fuel, vehicle maintenance, group health insurance, vehicle insurance, marketing expense, support staff (i.e. - dispatch), etc.

This is the preferred method of allocating Overhead to the department that uses it.



3. **Labor Related Method** - Overhead tends to follow Labor, so this is a good method for those expenses that can't be traced to a particular department. This method allocates Overhead expenses in proportion to the Direct Labor Payroll Cost.

Example - If the Direct Labor Payroll is \$400,000 and Service Payroll is \$128,000, Service is allocated 32% of the total overhead expense.

$$\frac{\$128,000}{\$400,000} \text{ equals } 32\%$$

This method works well for expenses that do not tie directly to a specific department. Administrative salaries would be an example.

4. **Space Related Method of Allocating Overhead** - Overhead expenses are broken out based on square footage.

Example: Say a company occupies a 5,000 square foot facility and Service uses 1,000 square feet. Service is allocated 20% of the applicable Overhead expense.

$$\frac{1,000 \text{ Sq. Ft.}}{5,000 \text{ Sq. Ft.}} \text{ equals } 20\%$$

Some samples of **space related** expenses include:

- Rent
- Utilities
- Building Maintenance and Repair
- Building insurance
- Property taxes, etc.

If you do not want to go to the trouble of allocating expenses based on the **Space Related Method**, utilize the **Labor Related Method** for these types of expenses.

5. **Management Discretion Method** - Management decides how Overhead expenses are going to be allocated. This works well for expenses such as Owner salary or for office salaries where work is performed for several departments. It's a good idea to poll office employees to see what percentage of their time is spent supporting each department. When using the **management discretion method**, avoid being put in a situation where your decision is needed on every Overhead transaction.

Actually allocating Overhead is a combination of all the methods discussed. If possible, utilize the **direct allocation method**. For other expenses, look at the line item and allocate to the appropriate department using the best method for that category of expense.

Other Income Statement Considerations

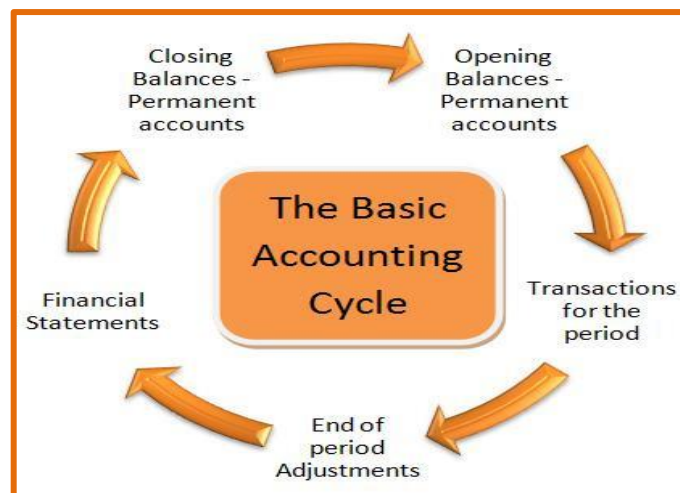
Get the Income Statement in a timely manner after month-end. Set an objective to have the Income Statement available within ten business days after month end. Within five business days is even better. The longer it takes to get the Income Statement, the less time you have to manage changes that may be needed.

It's good to show the particular month as well as year-to-date numbers. This probably means running 2 reports with different date ranges. Use the year-to-date numbers to see if the company is on track to achieve its goals for the year.

Format your Income Statement to show percentages as well as actual dollars. Some accounting systems also show performance to budget and variances from the budget.

Try to embrace an "open book" philosophy with employees. They are part of the team and deserve to know how the company is doing.

As of January 30:	Actual		Last Year		Budget		Variance to Budget
Sales	\$80,000	100.0%	\$73,600	100.0%	\$76,800	100.0%	\$3,200
Material	\$9,600	12.0%	\$8,832	12.0%	\$9,216	12.0%	\$384
Direct Labor	\$8,000	10.0%	\$7,360	10.0%	\$7,680	10.0%	\$320
Equipment	\$16,000	20.0%	\$14,720	20.0%	\$15,360	20.0%	\$640
Sub-Contract	\$240	0.3%	\$221	0.3%	\$230	0.3%	\$10
Permits	\$240	0.3%	\$221	0.3%	\$230	0.3%	\$10
Callbacks	\$400	0.5%	\$368	0.5%	\$384	0.5%	\$16
Extended Warranty	\$800	1.0%	\$736	1.0%	\$768	1.0%	\$32
Promotion	\$800	1.0%	\$736	1.0%	\$768	1.0%	\$32
Warranty Allocated Fringes	\$1,200	1.5%	\$1,104	1.5%	\$1,152	1.5%	\$48
Sales Commission	\$4,800	6.0%	\$3,680	5.0%	\$3,840	5.0%	\$960
TOTAL COST	\$42,080	52.6%	\$37,978	51.6%	\$39,628	51.6%	\$2,452
Gross Profit	\$37,920	47.4%	\$35,622	48.4%	\$37,172	48.4%	\$748



Working With Your Accountant

You need an **Accountant** to prepare quarterly income estimates and annual tax filing requirements. He/She should be able to give advice in planning for taxes as well as providing support should the company get audited. In addition to tax preparation, he/she should provide personal finance advice.

Depending on your accounting software, your **Accountant** should be able to provide software support in terms of day-to-day transactions.

But beyond tax accounting, there is the need for managerial accounting. In fact, this is the most important type of accounting for operating a contracting business. A good **Accountant** should be able to function as a CFO to advise you how to meet your financial goals. Not all **Accountants** or CPAs offer the same level of service.

Most **Accountants** are trained to do taxes, NOT how to run a business. That being the case, most of them tend to set up the "books" for the ease of creating a tax document and not to create Financial Statements for management purposes.

Most **Accountants** do not understand the HVAC contracting business. Not because they are bad at their job, but because they haven't been trained in the HVAC business. It's YOUR responsibility to educate your **Accountant** to your business needs.

Many contractors are intimidated by professionals like CPAs, but don't be. The first step is to understand what you need and want. You need to know the financial structure needed to get meaningful information. Communicate your needs and wants to your **Accountant** in terms of clear objectives. It Implies:

- You understand your business
- Your **Accountant** must be more than a vendor that just counts. You want their involvement in the business to help provide excellent financial controls and structure

If your current **Accountant** will not meet your expectations, it's time to find a new one who will get the job done and values your business.

