

Blueprint for Success



Introduction to Residential Air Duct Cleaning Guide

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Exploring

Residential air duct cleaning as part of the growing indoor air quality market represents a tremendous opportunity. To take advantage of this opportunity you need to consider many issues and questions. This “Blueprint for Success” Introduction to Residential Air Duct Cleaning Guide was developed to help walk you through the many issues and questions you will have as you consider this tremendous opportunity.

This Guide is based on over 20 years of experience helping companies and people like you, who want to become successful residential/light commercial air duct cleaning contractors.



Contractor benefits of residential air duct cleaning.

Residential air duct cleaning represents a tremendous business opportunity as a stand-alone business or as an add-on to an existing business. Residential air duct cleaning offers you many attractive features including:

- Excellent gross margins (40% to 60%).
- Can provide significant add-on revenues with existing customers.
- Can generate new customers for your existing products and services.
- Can help sell other IAQ related products and services.
- Can generate revenues during slow times of the year.

What is air duct cleaning?

Air duct cleaning is more than cleaning air ducts. A more appropriate term to use would be HVAC system cleaning (HVAC means heating, ventilating and air conditioning). The HVAC system includes everything in the air stream: the registers, grilles and diffusers, the supply ductwork and the return ductwork, and the furnace or air handler.

- You first put the HVAC system under negative pressure (suction) with your vacuum collection system. This keeps the dirt, debris and other contaminants from escaping through the cracks and seams in the ductwork into the home or building space during the cleaning process. The vacuum collection system also collects all the dirt and debris that you remove via cleaning.
- Once under negative pressure you clean the ductwork by dislodging the accumulated dirt, debris with your air washing/whipping and power brushing tools. The suction from the vacuum collection system will capture the light particles and a final air wash will push any remaining debris into the collection system.
- Some surfaces, like the inside of the furnace or air handler, you clean via contact vacuuming.
- Coils can be cleaned via contact vacuuming, air washing or with coil cleaning solutions and a water rinse.
- If microbial contamination is a concern the HVAC system can be cleaned and then sanitized.
- In some HVAC systems there is fiberglass insulation. In many of these systems this insulation is deteriorated over time and must either be replaced or repaired.

The overall goal is to remove all of the accumulated dirt, debris and other contamination found

in the HVAC system. This is called source removal. Source removal is the only method endorsed by the National Air Duct Cleaners Association (NADCA).

NADCA has created a cleaning specification called ACR 2013 which give you complete details on what is required to meet their air duct cleaning standard.

Is there a need for air duct cleaning?

Yes. Not every home or building needs to have its air ducts cleaned today but there is a good possibility that over time the clean air ducts of today will become the dirty air ducts of tomorrow.

Inadequate filtration, pets, activities within the building or home, renovation and construction debris, and microbial contamination are just some of the reasons why air duct systems become dirty and/or contaminated.

Does HVAC system cleaning really work?



Yes, if done properly, HVAC system cleaning can improve the indoor air quality of the home or building and in most cases can improve the energy efficiency of the HVAC system. Common sense tells us that if you remove the accumulated dirt, debris and contaminants from the fan, coils, ductwork and other components in a HVAC system the air quality of that home or building will be improved and the HVAC system should run more efficiently.

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There have not been a lot of studies done to look at this question but NADCA and the Environmental Protection Agency (EPA) did a pilot study that did indicate that, when done properly, dust level were reduced and efficiency of the HVAC system improved.

The pilot study was designed to evaluate the effectiveness of HVAC system cleaning in residences. The study was conducted on 9 homes in North Carolina during 1996 with pre and post testing. The results showed:

- Dust levels prior to cleaning were:
 - Supply ducts 1.48 to 26.03 g/sq. meter
 - Return ducts 5.26 to 35.11 g/sq. meter
- Dust levels after cleaning were:
 - All ducts 0.06 to 1.97 g/sq. meter
- Improved system performance was indicated by:
 - Supply air flows increased 4 to 38% in 8 homes measured
 - Air handling unit blower motor current increased in the 4 homes that were measured
 - Static pressure in return ducts increased in the 6 homes that were measured.

To obtain a copy of the study you can contact NADCA at 855-Go-NADCA.

What qualifications do I need to clean HVAC systems?

The ability to learn and understand how HVAC systems works, the ability to learn how to inspect, clean and decontaminate a HVAC system, and the commitment to doing quality work. Many people start out doing residential air duct cleaning since residential HVAC systems are easier to understand. Later on some choose to add

other complimentary services or expand into commercial air duct cleaning.

Now if you have a mechanical contracting background you already have knowledge of how an HVAC systems works but there are many trades that are entering into the air duct cleaning business including:

- Mechanical contractors
- Plumbing contractors
- Mold abatement contractors
- Fire restoration contractors
- Carpet cleaning contractors
- Chimney sweeps
- Others

Even if you are an individual without these types of backgrounds you can become a successful air duct-cleaning contractor. Your success will be based on your desire to learn what is required, your ability to provide quality work and your ability to provide good customer service.

Are there licensing requirements?

Every state is different. In some states you don't need anything, while in other states you must obtain a mechanical contractors license. Contact your appropriate state agency to determine what is required in your state.

Planning

What service offering is right for you?

There are no right or wrong answers because you can be successful no matter what level of services you offer. Some contractor clean just the ductwork. Some contractors clean the ductwork and parts of the furnace or air handler. Some contractors clean everything in the HVAC system.

The level of service you offer will, however, determine who

you are competing against, what type of clients you will serve and what equipment you will need. In addition to deciding what services you want to offer you must decided what level of cleaning you want to offer. Currently there are three levels of cleaning quality.



1. The first level is air washing only. Air washing is the use of high-pressure air that comes from your air compressor through an air hose to an air nozzle. This air nozzle delivers the streams of high-pressure air, which dislodges the accumulated dirt and debris. The suction from the vacuum collection system and the high-pressure air from the air nozzle move the dirt and debris that has been dislodged from the ductwork into the vacuum collection system.



2. The next level of cleaning is achieved by using air whips. Air whips is a combination of air washing (high pressure air) with some agitation from the whips. This is a higher level of cleaning because; in addition to air washing the whips make contact with some of the interior ductwork. Again, the suction from the vacuum collection system and the high-pressure air from the air nozzle move the dirt and debris that has been dislodged from the ductwork into the vacuum collection system.



3. The highest level of cleaning is achieved by power brushing and air washing because it

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Residential Air Duct Cleaning Matrix			
Basic Cleaning Tasks	Applicable Cleaning Methods		
	(good)	(better)	(best)
Visual Inspection Before & After Cleaning	flashlight & mirror	periscope	remote camera system
Remove, Clean and Replace: Supply Registers Return Grilles	air wash	contact vacuum	wet clean
Clean Supply Ductwork & Plenum	air wash	air whips	power brush
Clean Return Air Ductwork & Plenum	air wash	air whips	power brush
Install Access Panels as Needed	same gauge sheet metal, seal edges		
Clean Blower Motor & Assembly:	air wash in place	vacuum in place	remove, wet clean, replace
Clean Air Stream Side of Heat Exchanger	air wash		
Clean Secondary Heat Exchanger	air wash		
Clean Evaporator Coil, Drain & Pan:	air wash in place	wet clean in place	remove, wet clean, replace
Replace Air Filter	with same	with upgrade	
Wash Air Cleaner	wet clean		
Additional Services			
Clean Dryer Vent	air wash	air whips	power brush
Sanitize System	fog in		
Install UV Lights	in coil area		
Select Services you will provide by putting an "x" in the box on the left	Select Cleaning Methods you will use by putting an "x" in the box under that method		

does the best job of removing the accumulated dirt and debris in the ductwork. Power brushing makes physical contact with more of the interior surface than the other methods. Air washing after brushing is necessary to help move the dirt and debris out of the ductwork to the vacuum collection system.

Contact vacuuming is another method that achieves the highest level of cleaning because you are making physical contact with the duct surface.

You need to examine your own capabilities and select from the Residential Air Duct Cleaning Matrix (above) what basic cleaning tasks you want to offer your customers. And then what

cleaning methods you want to offer. A good way to work through these choices is to make a copy of the matrix and then ask yourself what would you want done at your house.

Know your competitors.

You need to know your competitors, what levels of service they offer and what they charge for their services. You find this out by doing a little market research. Make several copies of the Residential Air Duct Cleaning Matrix (one for each competitor). Use this as guide and checklist as you call your potential competitors and find out what level of service they offer, what level of cleaning they offer and at what prices. Call a good sampling (3-5) of your competitors and ask for a quote on cleaning your house or your mother's house. During this process ask lots of questions using the matrix as your guide.

You could find contractors that charge \$ 89.00 and contractors that charge \$600.00. You need to understand why there is this difference in price and what the customer gets for the extra \$511.00 You will find that there are different levels of cleaning (air washing, air whips, power brushing, contact vacuuming) and different levels of services (from cleaning just the supply/return ductwork only to cleaning every component in the HVAC system.)

This type of market research will give you a good understanding of current market pricing and what services are included for that price. With this knowledge you can better determine where you want to be.

Possible Questions

1. Do you offer before and after visual documentation?
2. Can you describe how you clean the supply and return ducts? Do you power brush, air whip or air wash?
3. Can you describe how you clean the grilles and registers? Do you air wash, contact vacuum or wet clean?
4. Can you describe how you clean the furnace or air handler?

- Do you clean the blower/fan section? Do you air wash or contact vacuum?
 - Do you clean the coil? Do you air wash, contact vacuum or apply a coil cleaner and then rinse? Do you do this in place or do you remove the coil?
 - Do you clean/inspect the heat exchanger? Do you air wash it?
6. Do you replace the filter or offer upgrades?
 7. I have ___ supply registers and ___ return registers how much would you charge?
 8. About how long would this take?
 9. Do you use a one or two person crew?
 10. Are they NADCA certified (ASCS = Air System Cleaning Specialist)
 11. Do you offer dryer vent cleaning? What does that cost?
 12. Do you offer sanitizing? What does that cost?
 13. Do you offer/install UV lights? What does that cost?
 14. Do you offer any kind of a guarantee?

Pricing and pricing strategies

There are several ways to determine what you will charge your customers.

- By the number of vents.
- By the square feet of the house.
- By what services you deliver to your customer.

The bottom line is that you need to make at least \$90.00 or more per man-hour to have gross profits that ranges from 40% to 60%. If you pay close attention to your other expenses (marketing, overhead etc.) and keep them in the 25% to 30% range you can make 10% to 35% net profit.

Some contractors quote the project over the phone based on the number of vents. Others quote over the phone by the number of rooms or floors. We

recommend visiting the home to do an inspection (to determine need) and then sitting down with your customer and explain the different services you offer and the different levels of cleaning (maybe use the matrix as a sales tool). This gives you the opportunity to set yourself apart from the competition and to maximize your revenues on each project.

We recommend a ladder pricing approach. It gives you the flexibility to compete with the lower price contractors yet gives you the ability to sell up to higher levels of cleaning and more services. The prices listed here are starting points. Based on the research you did on your competitors you should adjust these to fit your market area and the services you will offer.

Pricing Options

Visual Inspection: Free
Supply & return ductwork & plenum:

- Air washing \$ 15.00 per vent
- Air whipping \$ 20.00 per vent
- Brushing & air washing \$ 25.00 per vent

Remove, clean & replace all registers & grilles:

- Air washing \$ 25.00
- Contact vacuuming \$ 30.00
- Wet cleaning \$ 35.00

Clean blower motor & assembly:

- Air washing \$ 25.00
- Contact vacuuming \$ 35.00
- Remove, wet clean & replace \$ 65.00

Clean coil & drain pan:

- Air wash in place \$ 15.00
- Contact vacuum \$ 20.00
- Wet clean in place \$ 25.00
- Remove, wet clean & replace \$ 50.00

Heat exchanger:

- Air washing \$15.00

Replace air filter:

- Same \$ free
- Upgrade \$ 5.00

Additional Services

Clean dryer vent:

- Air washing \$ 20.00 & up
- Air whipping \$ 25.00 & up
- Brushing & air washing \$ 30.00 & up

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Sanitizing:

- Fogging \$100.00

UV lights

- For coil area from \$250.00

Equipment Options:

Lets start with a basic explanation of the different types of vacuum collection systems and their strengths (+) and weaknesses (-).



Truck Systems (gas):

- + Best performance (suction)
- + No zoning required
- + Best adverting impact
- Highest first cost
- Highest operating cost (gas)
- Highest maintenance cost
- + Can do 1-2 story buildings (residential & commercial)
- Can't do multi-story buildings (apartments, condos, commercial)



Trailer/Truck Mounted Systems

(gas):

- + Very good performance (suction)
- + Zoning not normally required
- High first cost
- High operating cost (gas)
- Medium maintenance cost
- + Can do 1-2 story buildings (residential & light commercial)
- Can't do multi-story buildings (apartments, condos, commercial)



Portable Gas Systems:

- + Very good performance (suction)
- + Zoning not normally required
- Medium first cost
- High operating cost (gas)
- Low maintenance cost
- + Can do 1-2 story buildings (residential & light commercial)
- Can't do multi-story buildings (apartments, condos, commercial)



Portable Electric Systems:

- + Good performance (suction)
- Zoning normally required
- + Lowest first cost
- + Lowest operating cost
- + Lowest maintenance cost
- + Can do 1-2 story buildings (residential & light commercial)
- + Can do multi-story buildings (apartments, condos, commercial)

The services you have decided to offer will determine what type of equipment you will need. In generic terms a typical equipment package will include:

- Vacuum collection system – puts ductwork under negative pressure (suction).
- Agitation tools – used to dislodge accumulated dirt, debris and contaminates.
 - Power brushing systems
 - Air whip systems
 - Air washing tools

- Air compressor – provides high-pressure air for air washing tools and air whips.
- HEPA filtered wet/dry vac – used to contact vacuum surfaces
- Duct accessing tools and service panels – used to cut access openings, isolation, and closing access openings.
- Visual inspection system (optional) – used to show client pre (existing) and post (after cleaning) conditions in the ductwork.
- Chemicals and chemical dispensing tools (optional)
- Sanitizer and fogger, coil cleaner, degreaser etc.

You also need to supply miscellaneous items (hand tools, ladders, drop cloths, etc.) and a truck or trailer to transport the equipment.

Take a copy of the matrix where you indicated what services you want to offer and what cleaning methods you want to use and fax it to several equipment supplies for a quote. The equipment suppliers can then tailor the quote to your specific needs.

Appendix A illustrates several different equipment packages and their pricing.

What does it cost to get into residential air duct cleaning?

The cost will vary depending on the equipment you choose but a basic equipment package will range from:

- \$6,000.00 to \$7,500.00 for an electric portable package
- \$8,000.00 to \$10,000.00 for a gas portable package
- \$17,000.00 to \$20,000.00 for a trailer/truck mounted gas package.
- \$75,000.00 and up for a truck package.

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In addition you will need a truck/van or trailer to transport the equipment (except for a truck system)

- If you already have one there would be no additional cost.
- A new trailer with a top and ramp can cost \$2,750.00 and a new truck or van can cost \$15,000.00 to \$25,000.00.
- Used vehicles and trailers can reduce this cost.

There are different purchasing options that can greatly affect your payments.

- Leasing gives you the lowest first cost and lowest monthly payment which can be an important consideration when you are starting out.
- You can also pay for the equipment up front and avoid any financing/interest charges. This gives you the lowest over all cost.

Revenue projections.

The revenue you generate will depend on what services you are going to offer and what your overhead (rent, advertising, phone, vehicle, lease, etc.) expenses will be. Since everyone's situation is different we recommend that you do an in-depth analysis to estimate your specific revenue potential and expected expenses.

We can look at a few examples that can give you a reasonable idea of what you might expect

One-person crew (owner/operator)

- Offering services that will total \$200.00 and takes 3 hours to complete.
- \$200.00 per job x 2 jobs per day = \$400.00 x 5 days a week = \$2,000.00
- x 50 weeks a year = \$100,000.00
- x 50% profit margin = \$50,000.00 gross profit
- less 25% overhead and marketing expense = \$37,500.00 net profit (this is in addition to the regular wages paid)

One-person crew (owner/operator)

- Offering services that will total \$300.00 and take 4 hours to complete.
- \$300.00 per job x 2 jobs per day = \$600.00
- x 5 days a week = \$3,000.00
- x 50 weeks a year = \$150,000.00
- x 50% profit margin = \$75,000.00 gross profit
- less 30% overhead and marketing expense = \$52,500.00 net profit (this is in addition to the regular wages paid)

Two-person crew (owner and helper)

- Offering services that will total \$400.00 and take 3 hours (6 man hours) to complete.
- \$400.00 per job x 2 jobs per day = \$800.00
- x 5 days a week = \$4,000.00
- x 50 weeks a year = \$200,000.00
- x 50% profit margin = \$100,000.00 gross profit
- less 30% overhead and marketing expense = \$70,000.00 net profit (this is in addition to the regular wages paid)

Two-person crew (owner and helper)

- Offering services that will total \$500.00 and take 4 hours (8 man hours) to complete.
- \$500.00 per job x 2 jobs per day = \$1,000.00
- x 5 days a week = \$5,000.00
- x 50 weeks a year = \$250,000.00
- x 50% profit margin = \$125,000.00 gross profit
- less 35% overhead and marketing expense = \$81,250.00 net profit (this is in addition to the regular wages paid)

What about training?

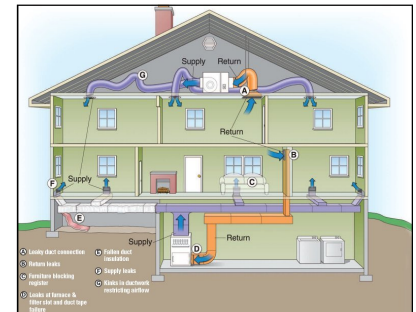
Training is very important. You want to learn how to maximize your cleaning productivity (for greater profits and revenues) as well as maximizing your cleaning quality (for greater customer satisfaction and more referrals). 90%

to 95% of your HVAC system cleaning cost is labor.

There are three sources for training:

- NADCA: NADCA offers a series of videos for entry level technicians call "Ventilation Maintenance Technician (VMT) Program. Plus they offer a webinar on the Basics of Residential Air Duct Cleaning.
- Equipment suppliers: Some equipment suppliers offer either videos, power point training, or hands on training.
- Other air duct cleaning contractors: Some contractors are willing to train you if you are not in there area. They are not going to train a competitor.

Doing



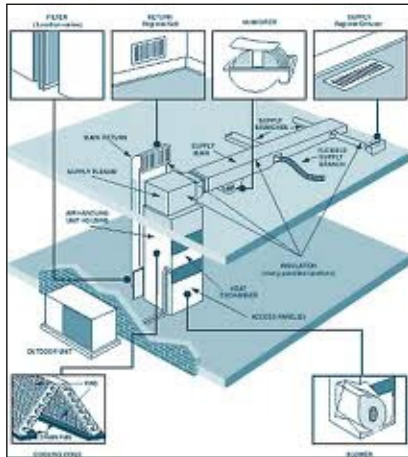
The Cleaning Process

The cleaning process can vary depending on what level of cleaning you offer (good, better, best) and what components are to be cleaned (supply ductwork, return ductwork, register/grills, various furnace components, coil, etc.). We'll go through the basic steps below:

1. Preparation

- Introduce yourself.
- Review your cleaning process with customer.
- Verify pricing.

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- Verify that the HVAC system operates properly.
- Turn HVAC system off.
- Protect furniture, floors as needed.

2. Inspection

- Take photos or video of existing conditions to justify your services.
- Select vents in high traffic areas.
- 1-2 return ducts (they are always dirties).
- 2-3 supplies ducts.
- Show customer existing conditions.

3. Set-up - Supply Side

- Isolate supply side from return side at the filter by taking the filter out, put in plastic bag, slide back in place.
- Cut access hole for vacuum flex hose/attachment collar In main supply duct near the coil.
- Put foam cube over coil to protect coil from dirt.
- Attach collar to ductwork and attach flex hose.
- Use shortest length of flex hose from collector (electric or gas unit) to maximize suction in the duct.
- Turn the vacuum collection system on.
- If you have and electric portable collector cover all the supply registers (called zoning off) except the one that is the farthest away.

This will maximize the suction through that branch duct.

- If you have a gas collector you probably will not need to zone off any registers.
- Bring cleaning tools (brushes, air nozzles, whips) to 1st branch duct.
- Bring airline from air compressor to 1st branch duct and use corner guards if needed.

4. Cleaning Supply Branch Ducts

- Remove register and clean with chosen method (air wash, contact vacuum, wet clean).
- Contact vacuum or gently air wash boot area pushing any dirt/debris down the duct (be careful not to have any blow back of dirt into room).
- Insert and turn on air washing or whipping tool, push cleaning tool down the branch run until you reach the main trunk, pull cleaning tool back, turn off air supply and remove from duct. Or
- Insert brush, while pulling the trigger on your drill push rotating brush down the branch run until you reach the main trunk, pull the rotating brush back out of the duct, insert forward skipper line and do final air wash. Reinstall register.
- Repeat this procedure with your chosen cleaning tool(s) on the remaining supply branch ducts.
- Take a few after cleaning photos to show your customer what a good job you did.

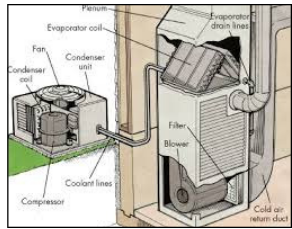
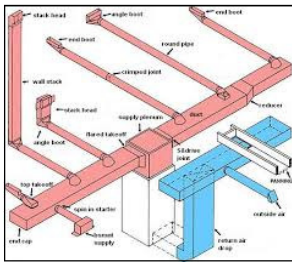
5. Cleaning Supply Main Duct

- At this point, all the dirt in the supply branch ducts have been pushed (by the cleaning tools) and pulled (by the vacuum suction) into the main supply duct.

- If you have access to the end cap of the main supply duct, remove it and use this as your access opening. If you can not use the end cap you will have to cut an access opening or drill a 1" hole (depending on the cleaning tools you are using) in the duct close to the end cap.
- Using your chosen cleaning tools move the accumulated dirt toward the vacuum flex hose connected to the main supply duct. When finished re-install the end cap.
- If you don't have access to the end of the main supply duct you will have to create your access opening close to the furnace/air handler and work to pull the accumulated dirt back towards the vacuum flex hose connection.
- Once the supply side of the HVAC system is clean, then remove the vacuum hose from the supply main trunk line, remove the foam cube protecting the coil and cover the access opening with a service panel.

6. Set-up - Return Side

- Cut access hole for vacuum flex hose/attachment collar in return drop just before the filter.
- Attach collar to ductwork and attach flex hose.
- Use shortest length of flex hose from collector (electric or gas unit) to maximize suction in the duct.
- Turn the vacuum collection system on.
- If you have and electric portable collector cover all the return registers (called zoning off) except the one that is the farthest away. This will maximize the suction through that branch duct.
- If you have a gas collector you probably will not need to zone off any grills.



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- Bring cleaning tools (brushes, air nozzles, whips) to 1st return branch duct.
- Bring airline from air compressor to 1st branch duct and use corner guards if needed.

7. Cleaning Return Branch Ducts

- Remove grill and clean with chosen method (air wash, contact vacuum, wet clean).
- Contact vacuum or gently air wash boot area pushing any dirt/debris down the duct (be careful not to have any blow back of dirt into room). Remember most of the dirt in the HVAC system is on the return air side.
- Insert and turn on air washing or whipping tool, push cleaning tool down the branch run until you reach the return main trunk, pull cleaning tool back, turn off air supply and remove from duct. Or
- Insert brush, while pulling the trigger on your drill push rotating brush down the return branch run until you reach the main trunk, pull the rotating brush back out of the duct, insert forward skipper line and do final air wash. Reinstall register.
- Repeat this procedure with your chosen cleaning tool(s) on the remaining supply branch ducts.
- Take a few after cleaning photos to show your customer what a good job you did.

8. Cleaning Return Main Duct

- At this point, all the dirt in the return branch ducts have been pushed (by the cleaning tools) and pulled (by the vacuum suction) into the return main duct.
- If you have access to the end cap of the return main duct, remove it and use this as your access opening. If

you can use the end cap you will have to cut an access opening or drill a 1" hole (depending on the cleaning tools you are using) in the duct close to the end cap.

- Using your chosen cleaning tools move the accumulated dirt toward the vacuum flex hose connected to the return drop. When finished re-install the end cap.
- If you don't have access to the end of the return main duct you will have to create your access opening close to the furnace/air handler and work to pull the accumulated dirt back towards the vacuum flex hose connection.
- Once the return side of the HVAC system is clean, then remove the vacuum hose from the return drop and cover the hole with a service panel.

9. Cleaning Coil

- Not every contractor cleans the coil in the furnace or air handler. This is one of the decisions you make when you are deciding what services to offer. This is ok as long as your customer knows that you are not cleaning the coil.
- If you are cleaning the coil remember that most of the dirt will be on the underside (air entering side). When cutting your access opening be very careful not to nick/cut the coil or the refrigerant lines.
- There are several cleaning methods to choose from:
 - air washing.
 - contact vacuuming.
 - wet cleaning with coil cleaner and water rinse.
 Remember to control and collect the dirt from the coil as you are cleaning it.

10. Cleaning Primary & Secondary Heat Exchangers.

- The most common method to clean heat exchangers is to air wash them with high

pressure air. Secondary heat exchangers are not always accessible for cleaning.

11. Cleaning Fan Section

- There are several cleaning methods to choose from:
 - air washing.
 - contact vacuuming.
 - remove, wet cleaning and replace.
 Remember to control and collect the dirt. When air washing by placing your vacuum hose next to the fan section opening.

12. Verification

- The most common way to verify that you have cleaned the HVAC system is to show your customers before and after photos. This proves that you did a good job and makes your customer happier about paying your invoice but more importantly you are more likely to get referrals from happy customers.

13. Summary

- Remember this is just a basic review of cleaning procedures. Depending on equipment/tools you have and the scope of cleaning you are offering you will, over time develop your own preferred cleaning methods.

Marketing

The best marketing you can do is delivering quality work. Satisfied customers (who will refer you) are the least expensive and most effective marketing tool created.

It is estimated that 60% or more of your business will come from referrals. Quality work is your first and most important marketing tool.

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To get the other 40% you need to spend additional dollars and use the traditional advertising and marketing tools including:

- You're first marketing effort should be a news release to your existing customer base (if you already have a related business) telling them that you are now offering this new service.
- Offer free inspection
- Leave behind sticker
- Door hangers on every home around every job
- Referral rewards program for existing customers
- Signage on your truck/van or trailer
- Shirts or uniforms for crew
- Direct mail
- Local home shows
- Mail Inserts, card packs
- Advertisements
- Telemarketing
- Internet/web site
- Social Media
- Radio
- Business networking groups like BNI International.
- Be involved in your community, sponsor a youth sport team.
- Develop your Name/Brand

Growing

Not long after you have started your HVAC system cleaning service or have added this service to an existing business you will ask yourself, "What can I do to grow my business?"

There are three ways to grow your business:

- Add additional services like:
 - Dryer vent cleaning
 - Sanitizing
 - Filter upgrades
 - UV lights
 - Duct leakage testing
 - Duct Sealing
 - Carbon monoxide testing

- Chimney sweeping
- Commercial air duct cleaning
- Etc.

- Expand the reach of your business by networking with other trades and become their air duct cleaning subcontractor. These trades include:
 - HVAC contractors
 - Fire, water, mold restoration contractors
 - Home inspectors
 - Carpet Cleaners
 - Chimney sweeps
 - Janitorial contractors
 - Etc.
- Expand the geographic reach of your business.

The Next Step

We hope you found this Introductory to Residential Air Duct Cleaning Guide useful. We hope you decide to get into this growing market.

Please call us with any questions. We have over 20 years of helping companies and people just like you. Our sole purpose is to help you succeed.



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A Word about NADCA.

National Air Duct Cleaners Association (NADCA) is a non-profit trade association dedicated to the continuous progression and improvement of the heating ventilating and air conditioning (HVAC) hygiene industry.

NADCA offers both consumers and contractors a wealth of information and benefits. We encourage you to look into NADCA and become involved in our industry!

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"Blueprint for Success" is a series of articles and publications developed by Vac Systems International to help you succeed as an air duct cleaning contractor. In addition to this publication they include:

- Selecting the Right Tool for the Job Guide
- How to Select an Electric Portable Vacuum Collection System Guide
- Going From Residential to Commercial Air Duct Cleaning Guide
- Introduction to Commercial Air Duct Cleaning
- Introduction to Estimating Commercial Air Duct Cleaning Projects Guide
- Marketing Commercial Air Duct Cleaning Services Guide
- Introduction to Coating HVAC Systems Guide
- Residential Air Duct Cleaning Power Point Training Program

Appendix A - Sample Equipment Packages



This equipment package is designed around the Super Collector E1.5 collector and is for the contractor who wants to clean residential (homes, apartments & condo's) and small commercial buildings. The E1.5 features a 1.5 hp motor, a 3,500"free air" cfm fan, turbo-top, the lowest possible operating and owning cost and one-person portability. Our recommended (and most popular) E1.5 package and some optional items are listed below.

Super Collector E1.5 Typical Equip. Package #2

- 1-SC15 Super Collector E1.5 Collector Package
- 2-SC01 10" Duct Attachment Collar
- 2-AC09 Super Air G9 Compressor
- 2-AC12 Std Compressor Accessory Package
- 1-SW02 Super Whip Deluxe System
- 1-SCB50 Super Combo Brush System
- 1-DAK-R Duct Accessory Kit
- 1-MK01 Free Personalized Marketing Kit
- 1-TN02 Free Power Point Training Program

Special Package Pricing.....\$ 7,100.00

Popular Optional Items

- 1-HV05 10 gallon HEPA dry vac w/tool kit
- 1-CDT01 ULV Fogger
- 1-SU02 EnviroCon sanitizer
- 1-SW01 Super Whip Basic System
- 1-SW04 Super Whip Airline System
- 1-SI01 Super Inspector V Inspection System
- 1-SMT01 Shavings Magnet Tool

Please contact us to add, delete and modify these packages to best suit your needs and to get a formal proposal that will include a detailed list of all the items in the package, their price and shipping cost.



This equipment package is designed around the Super Collector E-Max collector and is for the contractor who wants to clean residential (homes, apartments & condo's) and commercial buildings. The E-Max features twin 1.5 hp motors, twin 3,500"free air" cfm fans, turbo-top, the lowest possible operating and owning cost and good portability. Our recommended (and most popular) E-Max package and some optional items are listed below. .

Super Collector E-Max Typical Equip. Package #2

- 1-SCEM Super Collector E-Max Collector Package
- 2-SC01 10" Duct Attachment Collar
- 2-AC09 Super Air G9 Compressor
- 2-AC12 Std Compressor Accessory Package
- 1-SW02 Super Whip Deluxe System
- 1-SCB50 Super Combo Brush System
- 1-DAK-R Duct Accessory Kit
- 1-MK01 Free Personalized Marketing Kit
- 1-TN02 Free Power Point Training Program

Special Package Pricing.....\$ 8,500.00

Popular Optional Items

- 1-HV05 10 gallon HEPA dry vac w/tool kit
- 1-CDT01 ULV Fogger
- 1-SU02 EnviroCon sanitizer
- 1-SW01 Super Whip Basic System
- 1-SW04 Super Whip Airline System
- 1-SI01 Super Inspector V Manual Inspection System
- 1-SMT01 Shavings Magnet Tool

Please contact us to add, delete and modify these packages to best suit your needs and to get a formal proposal that will include a detailed list of all the items in the package, their price and shipping cost.



Appendix A - Sample Equipment Packages



This equipment package is designed around the Porta-Vac collector and is for the contractor who wants to clean residential homes and single story commercial buildings. The Porta-Vac features a 23 hp motor and large 17" diameter 6 bladed radial fan that delivers 16" W.C. static pressure for excellent productivity.

Porta-Vac Gas Portable Equipment Package

- 412WA065 Porta-Vac Gas Portable Collector
- 450PS272 (4) 8" x 25' Black Magic hose
- 450PT101 (3) 8" taper lock hose connectors set
- 450PT096 (2) 8" stainless steel quick clamps
- 450PT081 (1) 8" quick connect duct adapter collar
- 2-AC09 Super Air G9 Compressor
- 2-AC12 Std Compressor Accessory Package
- 1-SW02 Super Whip Deluxe System
- 1-SCB50 Super Combo Brush System
- 1-DAK-R Duct Accessory Kit
- 1-MK01 Free Marketing & Training Information
- 1-TN02 Free Power Point Training Program

Special Package Pricing.....\$10,300.00

Popular Optional Items

- 1-HV05 10 gallon HEPA vac w/tool kit
- 1-CDT01 ULV Fogger
- 1-SU02 EnviroCon sanitizer
- 1-SW01 Super Whip Basic System
- 1-SW04 Super Whip Airline System
- 1-SI01 Super Inspector V Inspection System
- 1-SMT01 Shavings Magnet Tool

Please contact us to add, delete and modify these packages to best suit your needs and to get a formal proposal that will include a detailed list of all the items in the package, their price and shipping cost.



This equipment package is designed around the Zephyr vacuum & compressor package and is for the contractor who wants to clean residential homes and single story commercial buildings. The Zephyr is a self contained collection system with a built in compressor and a unique enclosed filtration system. You just bolt the 4' wide x 6' long x 4' high onto your truck or trailer and go! This powerful package delivers a maximum static pressure of 30" W.C. which is double that of other systems.

Zephyr Vacuum System Typical Equip Package

- 421E-137A Zephyr Vacuum/Compressor Package
- 421WA007 (1) 10" to 8" inlet reducer
- 450PS272 (4) 8" x 25' Black Magic hose
- 450PT101 (3) 8" taper lock hose connectors set
- 450PT096 (2) 8" stainless steel quick clamps
- 450PT081 (1) 8" quick connect duct adapter collar
- 421D-205 (4) 3/8" x 50' air hoses w/quick couplers
- 2-AC05 Blow gun
- 1-SW02 Super Whip Deluxe System
- 1-SCB50 Super Combo Brush System
- 1-DAK-R Duct Accessory Kit
- 1-MK01 Free Personalized Marketing Kit
- 1-TN02 Free Power Point Training Program

Special Package Pricing.....\$ 20,700.00

Popular Optional Items

- 1-HV05 10 gallon HEPA vac w/tool kit
- 1-CDT01 ULV Fogger
- 1-SU02 EnviroCon sanitizer
- 1-SW01 Super Whip Basic System
- 1-SW04 Super Whip Airline System
- 1-SI01 Super Inspector V Inspection System
- 1-SMT01 Shavings Magnet Tool

Please contact us to add, delete and modify these packages to best suit your needs and to get a formal proposal that will include a detailed list of all the items in the package, their price and shipping cost.

If you are interested in the Super Truck Systems please call the contact the factory for a complete information package.

