

# Professional Estimating Systems

HVAC Estimation Software Development Company, Houston, Texas, USA.

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- Comprehensive HVAC Estimating Software package
- Save estimating time by 50%
- Simple to use and inexpensive
- HVAC projects on computer
- Current customers successfully used our software for HVAC projects from \$500 up to 5 million dollars.
- Software developed by 40+ years of HVAC experienced team
- Mechanical Engineer, HVAC Contractor, Master's degree Engineer & Professional Engineer involved in development.
- HVAC Software developed by HVAC team for HVAC contractors
- Tutorials and Telephone support available.

# Sheet Metal

Professional Estimating for HVAC Duct and Pipe

ProEst Sheetmetal Version I

File Help

Sheetmetal Version I

Welded Duct Option A

Job Zone Options Factors Input

Recap Job Notes Utilities Excel Jobs Help

Close

Job HISD Hogg MS Elevator

Date 11-18-2010

Estimator RJV

Floor Area

Drawing No

Snaplock Gauge Standard

Zone EXH/SA

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- Opening Sheet metal screen
- Set up new job or access old job
- Right click on job button to bring up last five jobs
- Select Options to pick version and other variables
- Select factors to update or change material or labor or to select special factors
- Excel jobs to make a recap sheet

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# Field Labor, Shop Labor and Welded Duct options

## Professional Estimating for HVAC Duct and Pipe

### Job/Zone/Welded Duct Options

#### Program Version

- ☒ Version I Field Labor at Linear Feet Duct/Hour
- ☐ Version II Shop and Field Labor at Lbs/Hour
- ☐ Version III Field Labor at Lbs/Hour
- ☐ Version IV Shop Labor Lbs/Hour - Field Labor Linear Feet

#### Job Factors Mode

- ☒ Default Factors
- ☐ Special Factors

#### Job Snaplock Gauge

- ☒ Standard Gauge
- ☐ SMACNA Gauge

#### Joint Length for Straight Duct

- ☒ 4 Ft
- ☐ 5 Ft
- ☐ 6 Ft

#### Welded Duct Option

- ☒ A Shop and field labor calculated by lbs/hour
- ☐ B Shop fabrication labor calculated by lbs/hour  
Shop welding calculated by inches of weld/hour  
Field labor calculated by linear feet of duct/hour  
Field welding calculated by inches of weld/hour
- ☐ C Shop fabrication labor calculated by lbs/hour  
Shop welding calculated by inches of weld/hour  
Field labor calculated by lbs/hour  
Field welding calculated by inches of weld/hour

#### Increase Metal Size

Increase duct metal size for liner thickness. ☒ Yes ☐ No

Change Password

OK

Cancel

Print

- Select version and option that works for you
- Select duct length that you use
- Increase metal size for liner: Yes or No
- Select special factors to adjust current job
- Select standard or SMACNA gage snap lock

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# Password Protection

- Set up a password to protect your data or use default
- Secure you estimating parameters

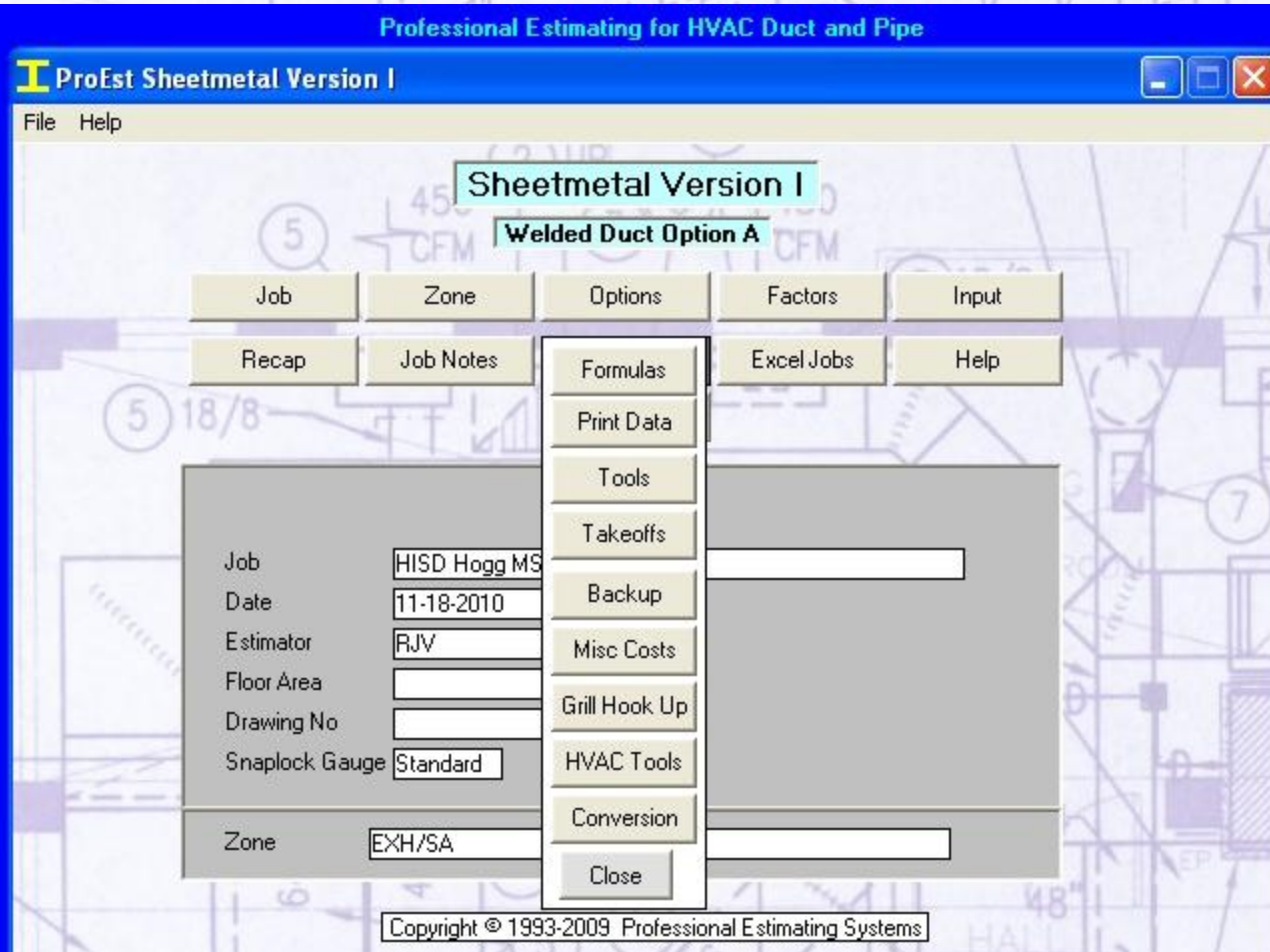
The screenshot shows the 'ProEst Sheetmetal Version I' software interface. The main window is titled 'Job/Zone/Welded Duct Options'. It contains several sections: 'Program Version' with radio buttons for Version I (selected), Version II, Version III, and Version IV; 'Welded Duct Option' with radio buttons for A (selected) and B; 'Job Factors Mod' with radio buttons for Default Factors (selected) and S; 'Job Snaplock Gauge' with radio buttons for Standard Gauge (selected) and S; and 'Joint Length for Straight' with radio buttons for 4 Ft (selected) and 5 Ft. A 'Password' dialog box is open in the foreground, titled 'Password' with a red 'X' icon. It contains the text 'Change password to edit the default factors', a 'Old password' field, a 'New password' field, and 'OK' and 'Cancel' buttons. Below the main window, there is a 'Change Password' button and 'OK', 'Cancel', and 'Print' buttons. The background of the slide features a technical drawing of a duct system with various labels like '450 CFM O.A.', 'AHU-C', 'ZONE 1-2', 'ZONE 2-1', 'ZONE 2-2', 'ZONE 3-1', and 'MICROWAVE'.

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# Utilities



- All formulas are provided for reference
- Print Data such as reinforcement schedules for your review
- Print take off sheets
- Spread sheets provided for misc. estimating costs
- Spread sheet for grill hook ups which includes options on spin-ins, flex and draw bands
- Spread sheets with common engineering formulae
- More to come!

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# Set up new job

**Professional Estimating for HVAC Duct and Pipe**

**Job Manager**

Jobs: 593

Job Name	HISD Hogg MS Elevator
Date	11-18-2010
Estimator	RJV
Floor Area	
Drawing Number	

OK Cancel

★ Special Factors @ Historical Data

Job Name	HISD Hogg MS Elevator
Date	11-18-2010
Estimator	RJV
Floor Area	
Drawing	

Close

Open New Edit Delete Save As Zones Preview

- Screen shot of job set up
- Includes name, date, estimator and reference to area

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# Sheet Metal Job Manager

Professional Estimating for HVAC Duct and Pipe

### Job Manager

Jobs: 593

Name	Date
HISD Hogg MS Elevator	11-18-2010
* Cy Fair Hospital CT Budget	11-16-2010
* UTMB John Sealy Stage 2 ALT 1	11-13-2010
* UTMB John Sealy Stage 2	11-13-2010
Crosby ISD-Duct Demo	11-12-2010
Vietnamese Community Center Kitchen Duct	11-12-2010
Vietnamese Community Center	11-12-2010
Duct Demo	11-12-2010
Callon Petroleum	11-11-2010
COH-Sagemont Park	11-09-2010
* at&t Jefferson 14th Floor	11-05-2010
* TMC Garage 10	11-04-2010
* TMH Pedestrian Walkway Katy	10-30-2010
Athletic Center (Archer Chrysler/Jeep)	10-29-2010
* Beaumont POB-MRI	10-28-2010
Chung Mei Buddhist Temple CO#1	10-27-2010

\* Special Factors @ Historical Data

Job Name: HISD Hogg MS Elevator  
Date: 11-18-2010  
Estimator: RJV  
Floor Area:   
Drawing:

- Lists all sheet metal jobs
- Holds up to 1000 jobs
- Sort by name or date
- List indicates if jobs have special factors or are included in historical data
- Begin new sheet metal job here
- Delete, edit or preview

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# Zone Set Up Options

**Professional Estimating for HVAC Duct and Pipe**

**Sheetmetal Input**

Zone Name: EXH/SA

Occurrences: 1 Zone Occurs 1 time(s) in the Job

Floor Area:

Drawing:

Gauge: ☒ Default ☐ Minimum ☐ Single

Duct Type: SHEETMETAL

Pressure: 4 INCH W.G.

Sealer Class: LONGITUDINAL and TRANSVERSE

Sealer Type: FTA GLUE TAPE

Duct Wrap: 2" 3/4 Lb Blk Fab/Mas

Duct Liner: NONE

Duct Input:

- Input no of occurrences to easily estimate multiple identical zones
- Use default gage or specify minimum or single for unique requirement
- Select sheet metal or ductboard
- Select sealer, duct wrap or liner type from drop down menu
- From this screen you can go to snaplock or spiral input or start another zone or perform recap

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# Zone Set Up

Professional Estimating for HVAC Duct and Pipe

Zone

File Help

Zones: 1

EXH/SA - Sheetmetal

Zone Name

☒ Standard Duct ☐ Welded Duct

☒ Rectangular ☐ Round

☒ Use New Settings  
☐ Use Settings From Last Zone  
☐ Use Settings From Selected Zone

OK Cancel

Details

Open New Edit Delete Close

- Select zone name
- Select standard or welded duct
- Use new settings or from any previous zone

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# Pressure Class Set Up

**ProEst Sheetmetal Version 1**

**2 Inch Pressure**

Duct	Gauge	Transverse	Drive	Intermediate
-10	26	FLAT "S"	NONE	
11-12	26	FLAT "S"	FLAT "S"	
13-14	26	FLAT "S"	1" STANDING "S"	
15-16	26	1" STANDING "S"	1-5/8 SW-1X3/16BAR	
17-18	26	1" STANDING "S"	1-5/8 SW-1X3/16AGL	
19-20	26	1" STANDING "S"	2" S W-1-1/2X3/16 AG	
21-22	26	1" STANDING "S"	2" S W-2-1/2X3/16 AG	
23-24	26	1" STANDING "S"	FLAT "D"	
25-26	26	1" STANDING "S"	1" STANDING "D"	
27-28	26	1" STANDING "S"	FLAT D W-1-1/2X3/16	
29-30	24	1" STANDING "S"	FLAT D W-2X3/16 AGL	
31-36	24	1" STANDING "S"	FLAT D W-2X1/4 ANGLE	
37-42	24	1" STANDING "S"	FLAT D W-2-1/2X3/16	
43-48	22	1" STANDING "S"	2X1/8 ANGLE	
49-54	22	1-5/8 SW-1X3/16BAR	2X3/16 ANGLE	
55-60	20	1-5/8 SW-1X3/16BAR	2X1/4 ANGLE	
61-72	18	1-5/8 SW-1X3/16BAR	2-1/2X3/16 ANGLE	2X1/8 ANGLE
73-84	18	1-5/8 SW-1X3/16AGL	1-1/2X3/16 ANGLE	2X1/8 ANGLE
85-96	18		1-1/2X3/16 BAR	2X1/8 ANGLE
97+	18			

Close

☒ Standard Duct ☐ Ductmate

**Standard Duct**

**2 Inch**

OK Cancel Print PgDn PgUp Pressure Class Pressure Setup

- Click on transverse reinforcement to see and select reinforcement options from available selections
- Click on drive or intermediate reinforcement to see and select reinforcement options from available selections
- Go to reinforcement cost to add or modify reinforcement selections

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NEXT



# Gauge Set Up

**ProEst Sheetmetal Version 1**

**2 Inch Pressure**

Duct	Gauge	Transverse	Drive	Intermediate
-10	26	FLAT "S"	FLAT "D"	
11-12	26	FLAT "S"	FLAT "D"	
13-14	26	FLAT "S"	FLAT "D"	
15-16	26		FLAT "D"	
17-18	26		FLAT "D"	
19-20	26		FLAT "D"	
21-22	26		FLAT "D"	
23-24	26		FLAT "D"	
25-26	26		FLAT "D"	
27-28	26		FLAT "D"	
29-30	24		1" STANDING "D"	
31-36	24		1" STANDING "D"	
37-42	24		1" STANDING "D"	
43-48	22		1" STANDING "D"	
49-54	22	AR	FLAT D W-1-1/2X3/16	2X1/8 ANGLE
55-60	20	AR	FLAT D W-1-1/2X3/16	2X1/8 ANGLE
61-72	18	1-5/8 SW-1X3/16BAR	FLAT D W-2X3/16 AGL	2X1/8 ANGLE
73-84	18	1-5/8 SW-1X3/16AGL	FLAT D W-2X3/16 AGL	2X1/8 ANGLE
85-96	18			
97+	18			

Close

☒ Standard Duct ☐ Ductmate

**Standard Duct**

**2 Inch**

OK Cancel Print PgDn PgUp Pressure Class Pressure Setup

- Click on gauge to see and select from available options
- Gauge, transverse, drive and intermediate can all be changed by a single click which directs you to the available options
- Options in transverse, drive and intermediate come preinstalled but can be changed or modified by going to reinforcement cost
- See reinforcement cost in next screen

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NEXT

# Reinforcement Cost

Professional Estimating for HVAC Duct and Pipe

## Reinforcement Cost

No	Description	Lbs/Lin Ft	\$/Lin Ft
1	NONE	----	----
2	FLAT "S"	.313	0.01
3	1" STANDING "S"	.615	0.47
4	1-5/8 SW-1X3/16BAR	1.836	1.17
5	1-5/8 SW-1X3/16AGL	2.470	1.32
6	2" S W-1-1/2X3/16 AG	3.390	1.72
7	2" S W-2-1/2X3/16 AG	4.019	2.21
8	FLAT "D"	.210	0.01
9	1" STANDING "D"	.614	0.57
10	FLAT D W-1-1/2X3/16	2.010	0.80
11	FLAT D W-2X3/16 AGL	2.650	1.01
12	FLAT D W-2X1/4 ANGLE	3.400	1.33
13	FLAT D W-2-1/2X3/16	3.280	1.29
14	2X1/8 ANGLE	1.650	0.70
15	2X3/16 ANGLE	2.440	1.00
16	2X1/4 ANGLE	3.190	1.32

	Lbs/Lin Ft	\$/Lin Ft
Ductmate 25	.100	0.43
Ductmate 35	.125	0.57
Corner		0.50
Cleat		0.20
Gasket		0.12

Last Revision Date: 03/17/04

OK Cancel PgDn PgUp Print

- Table of available reinforcement selection
- Add to or adjust those that come preinstalled
- Pick from this list when setting up you shop standards
- Allows for accurate of calculation reinforcement

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NEXT



# Accept Pressure Class Setup

ProEst Sheetmetal Version 1

## 2 Inch Pressure

Duct	Gauge	Transverse	Drive	Intermediate
-10	26	FLAT "S"	FLAT "D"	
11-12	26	FLAT "S"	FLAT "D"	
13-14	26	FLAT "S"		
15-16	26	1" STANDING "S"		
17-18	26	1" STANDING "S"		
19-20	26	1" STANDING "S"		
21-22	26	1" STANDING "S"		
23-24	26	1" STANDING "S"		
25-26	26	1" STANDING "S"		
27-28	26	1" STANDING "S"		
29-30	24	1" STANDING "S"		
31-36	24	1" STANDING "S"		
37-42	24	1" STANDING "S"		
43-48	22	1" STANDING "S"		
49-54	22	1-5/8 SW-1X3/16BAR		ANGLE
55-60	20	1-5/8 SW-1X3/16BAR		ANGLE
61-72	18	1-5/8 SW-1X3/16BAR		ANGLE
73-84	18	1-5/8 SW-1X3/16AGL		ANGLE
85-96	18			
97+	18			

Check to accept Reinforcement data for a pressure class.

Pressure	Standard Duct	Ductmate
1/2 Inch	<input type="checkbox"/>	<input type="checkbox"/>
1 Inch	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2 Inch	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3 Inch	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4 Inch	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6 Inch	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
10 Inch	<input type="checkbox"/>	<input checked="" type="checkbox"/>

OK

☒ Standard Duct   ☐ Ductmate   **Standard Duct**   **2 Inch**

OK   Cancel   Print   PgDn   PgUp   Pressure Class   Pressure Setup

- Check pressure class here to accept your set up
- After pressure class has been set up, check the respective checkbox to accept
- Avoids problem with using data that has not been fully installed

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# Duct Liner

## Professional Estimating for HVAC Duct and Pipe

### Duct Liner - Default

Description	Material /Sq Ft	Size	Size/Inches
1/2 Inch, 2 Lb(R2.2)	0.80	.5	> 1/2
1 Inch, 1-1/2 Lb(R4.2)	0.95	1	> 1
1 1/2 Inch, 1-1/2 LB(R6.3)	1.35	1.5	> 1-1/2
2 Inch, 2 LB(R8.0)	1.85	2	> 2
1 Inch, 3 LB	2.12	1	> 2-1/2
2 Inch, 3lb.	2.80	2	> 3
			> 3-1/2
			> 4
			> 4-1/2
			> 5
			> 5-1/2
			> 6

Page 1

Last Revision Date

09-10-08

Insert

Delete

PgDn

PgUp

OK

Cancel

Print

- Set up new or change existing liner types
- Adjust material prices
- Select liner thickness to adjust quantity

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NEXT



# Duct Insulation

## Professional Estimating for HVAC Duct and Pipe

### Duct Wrap - Default

Description	Labor Sq Ft/Hr	Material /Sq Ft	Size
2" 3 lb Venture Clad	20.00	7.75	2
1.5 3 Lb Rigid ASJ Fab&M	18.00	1.27	1.5
1" 3 Lb SR ASJ Fab&Mas	20.00	0.85	1
1.5" 3 LB SR ASJ Fab&Mas	18.00	1.18	1.5
2.0" 3 Lb Rigid ASJ.CP11	15.00	1.75	2
1.5" 3/4 Lb Blk Foil Tape	50.00	0.26	1.5
1.5" 3/4 Lb Blk Fab&Mas	35.00	0.29	1.5
1.5" 1 Lb Blk Foil Tape	45.00	0.35	1.5
1.5" 1 Lb Blk Fab&Mas	30.00	0.38	1.5
1.5" 1.5 Lb Blk Foil Tape	40.00	0.40	1.5

#### Size/Inches

- > 1/2
- > 1
- > 1-1/2
- > 2
- > 2-1/2
- > 3
- > 3-1/2
- > 4
- > 4-1/2
- > 5
- > 5-1/2
- > 6

Page 1

Last Revision Date  
09-10-08

Insert

Delete

PgDn

PgUp

OK

Cancel

Print

- Calculate quantity of duct wrap
- Insert material description, price, productivity and thickness

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NEXT

# Welded Duct

### Welded Duct Material Cost / Default / Rectang...

Gauge	Blackiron	304 Stainless	316 Stainless
	\$/Lb	\$/Lb	\$/Lb
20	1.75	7.00	8.25
18	1.75	7.00	8.25
16	1.75	7.00	8.25
14	1.75	7.00	8.25
12	1.75	5.00	8.25
10	1.75	5.00	8.25
8	1.75	5.00	8.25
3/16	1.75	5.00	8.25
1/4	1.75	5.00	8.25

Waste Factor  %

Last Revision Date

OK Cancel Print

### Welded Rectangular Duct

Cost

Labor

Miscellaneous

---

### Welded Round Duct

Cost

Labor

Miscellaneous

Close

### Welded Duct Labor Factors / Default / Rectangular / Option A

**Black Iron**

Consumables	Welded Duct	Procedure Factors		
<input type="text" value="5.00"/> %	<input type="text" value="28.50"/> /Hr	Stick <input type="text" value="1.00"/>	MIG <input type="text" value="1.10"/>	TIG <input type="text" value="1.10"/>

Gauge	Shop	Field
	Lbs/Hr	Lbs/Hr
20	999.00	10.50
18	999.00	10.50
16	999.00	10.50
14	999.00	10.50
12	999.00	10.50
10	999.00	10.50
8	999.00	10.50
3/16	999.00	10.50
1/4	999.00	10.50

Lbs/Hr = Lbs of Duct per Man Hour      In/Hr = Inches of Weld per Man Hour  
 Ft/Hr = Linear Feet of Duct per Man Hour

Last Revision Date  ☒ Black Iron ☐ Stainless

OK Cancel Print

- Reflects common gages and material types for welded duct
- Select material type and adjust cost and labor productivity

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# Accessory Section

Professional Estimating for HVAC Duct and Pipe

Accessory Factors / Default

Description	Labor Hours	Material Cost
Air Handling Unit	12.00	0.00
Multi-Zone Unit	16.00	0.00
Roof Top Unit	8.00	0.00
Fan Coil	3.00	0.00
Kitchen Hood	8.00	0.00
Wall fan	3.00	0.00
Roof Mounted Fan	4.00	0.00
Exhaust Fan	3.00	0.00
Unit Heater	3.00	0.00
Small Louver	2.00	0.00
Large Louver	4.00	0.00
Purchased Volume Dampers	1.00	0.00

Page 1

Insert Delete PgDn PgUp

Last Revision Date 09-23-08 OK Cancel Print

- Estimate Accessory items
- 80 items preinstalled.
- Modify existing or add your own item
- Show revision date as a reference

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# Type B Flue and Spiral

## Flue Pipe and Spiral Pipe/Input

	Type B Flue Pipe								
	4	6	8	10	12	14	16	18	20
Pipe									
90/Ell									
45/Ell									
Tee									
Flashing									
Reducer									
Collar									
Cap									

	Spiral Pipe								
	4	6	8	10	12	14	16	18	20
Pipe									
90/Ell									
45/Ell									
Coupling									
45/Tap									
Reducer									

Duct Wrap for Spiral

Sealer Type ☒ NONE ☐ FTA Glue and Tape ☐ Iron Grip 601  
 Sealer Class ☒ Transverse ☐ Longitudinal and Transverse

OK Cancel Recap Print

- Take off Type B flue and spiral
- Select Sealer and insulation options
- Go straight to job recap from this area.
- Go to factors to update material prices
- Save time with our software

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# Labor Productivity For Version I

Sheetmetal

Labor

Snaplock

Spiral/Flue Pipe

Accessory Items

Reinforcement

Reinforcement Cost

Duct Wrap

Duct Liner

Welded Duct

Custom I

### Labor Productivity Factors Version I - Default

Duct 0-12 Inch	3.25	Ft/Hr	Snaplock	4.00	Ft/Hr
Duct 13-30 Inch	3.00	Ft/Hr	Spiral	3.00	Ft/Hr
Duct 31-54 Inch	2.00	Ft/Hr	Sheetmetal and Accessories	\$ 25.50	/Hr
Duct 55-84 Inch	1.25	Ft/Hr	Drafting	\$ 27.00	/Hr
Duct 85+ Inch	1.00	Ft/Hr	Supervision	\$ 34.00	/Hr
Duct Sealer, Iron Grip	40.00	Ft/Hr	Duct Board	3.00	Ft/Hr
Duct Sealer, Tape and Glue	20.00	Ft/Hr	Ductmate	50.00	Ft/Hr
Manual Dampers	1.00	Hr/Ea	Flue Pipe	3.00	Ft/Hr
Fire Dampers <= 30 Inch	2.00	Hr/Ea			
Fire Dampers > 30 Inch	3.00	Hr/Ea			

Last Revision Date: 10/06/10

OK Cancel Print

Close

- Provides all labor productivity factors to estimate rectangular duct
- Buttons to the left are used to input respective labor and material costs
- Simple, easy and accurate!

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# Duct Reinforcement

Professional Estimating for HVAC Duct and Pipe

Flue Pipe and Spiral Pipe Cost Estimator (S4 Units) - Default

**6 Inch Pressure**

Duct	Gauge	4 Ft Joint	2 Ft Joint	Intermediate
-10	26	Ductmate 25		
11-12	24	Ductmate 25		
13-14	24	Ductmate 25		
15-16	24	Ductmate 25		
17-18	24	Ductmate 25		
19-20	24	Ductmate 25		
21-22	24	Ductmate 25		
23-24	22	Ductmate 25		
25-26	22	Ductmate 25		
27-28	22	Ductmate 25		
29-30	22	Ductmate 25		
31-36	20	Ductmate 25		
37-42	22		Ductmate 25	
43-48	22		Ductmate 25	
49-54	20		Ductmate 35	
55-60	20		Ductmate 35	
61-72	18		Ductmate 35	
73-84	18		Ductmate 35	
85-96	18		Ductmate 35	
97+	18		Ductmate 35	

1/2 Inch

1 Inch

2 Inch

3 Inch

4 Inch

**6 Inch**

10 Inch

Close

☐ Standard Duct
 ☒ Ductmate
 ☐ TDF

**Ductmate** **6 Inch**

- Ductmate reinforcement schedule
- Eight SMACNA tables available
- Easily change gages and reinforcements
- Program retrieves data based on select pressure class for the zone

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# Version I Material Costs

## Sheetmetal Cost Factors (\$/Units) - Default

### Material Cost

Straight Duct	<input type="text" value="1.15"/>	/Lb	Duct Board 2 Inch	<input type="text" value="2.50"/>	/Sq Ft
Fittings	<input type="text" value="2.35"/>	/Lb	Fire Damper Angle	<input type="text" value="0.57"/>	/Ft
Duct Board 1 Inch	<input type="text" value="1.31"/>	/Sq Ft	Manual Dampers	<input type="text" value="10.00"/>	/Ea
Duct Board 1.5 Inch	<input type="text" value="1.47"/>	/Sq Ft	Duct Sealer, Glue and Tape	<input type="text" value="0.17"/>	/Ft
Flex Connection	<input type="text" value="4.00"/>		Duct Sealer, Iron Grip	<input type="text" value="0.15"/>	/Ft
VR2 - Single W. Rail	<input type="text" value="3.46"/>	/Ft	Single Wall Turning Valve	<input type="text" value="0.50"/>	/Ft
2 Inch Speedy Rail	<input type="text" value="3.58"/>	/Ft	2" Double Wall Turning Valve	<input type="text" value="0.58"/>	/Ft
4 Inch Speedy Rail	<input type="text" value="4.00"/>	/Ft	4" Double Wall Turning Valve	<input type="text" value="1.31"/>	/Ft

Change from 2" DW to 4" DW at greater than  INCH vane length

### Waste Factors

Straight Duct	<input type="text" value="15.00"/>	%	Duct Wrap	<input type="text" value="10.00"/>	%
Fittings	<input type="text" value="15.00"/>	%	Duct Board	<input type="text" value="10.00"/>	%
Reinforcement	<input type="text" value="10.00"/>	%	Ductmate	<input type="text" value="25.00"/>	%
Liner	<input type="text" value="10.00"/>	%	Double Wall Turing Valve	<input type="text" value="10.00"/>	%
Single W Turing Valve	<input type="text" value="10.00"/>	%			

Last Revision Date

OK

Cancel

Print

- Includes cost of fabricated sheet metal
- Includes miscellaneous cost such as angle and sealer
- Automatically changes from 2 to 4" DW vane based on your shop standards
- Set up waste factors, inclusion of which increases your accuracy
- Pro-Est software includes many cost items such as duct sealer that you could not accurately calculate by hand
- Fast Accurate Simple!

BACK

NEXT

# Printing and Recap options

### Print

Check selections for printing

- ☒ Sheetmetal Input - Zones
- ☒ Accessory
- ☒ Sheetmetal Recap
- ☒ Labor Recap
- ☒ Job Notes
- ☒ Special Factors Summary
- ☒ Custom I
- ☒ Reinforcement
- ☒ Snaplock
- ☒ Spiral
- ☐ Type B Flue
- ☐ Turning Vanes

Select All      Clear All

☒ Normal Type    ☐ Condensed Type

Change Printer      Preview Selected

Print    Cancel Printing    Close

### Pro-Est I

Version 2.03 08-20-200

Sheetmetal

Labor

Zones

Accessory

Print Job

Preview All

Custom I

Close

### Preview

Version I \* Welded Duct Option A \* Snaplock Standard \* 11-18-2010

JOB: MISC Hogg MS Elevator

DATE: 11-18-2010      ESTIMATOR: RJV

---

ZONE INPUT

ZONE NAME ----- EXH/SA

ZONE OCCURS ----- 1 Time (Quantities below reflect totals for 1 occurrence)

FLOOR AREA -----

DRAWING NUMBER --

DUCT TYPE ----- SHEETMETAL

PRESSURE CLASS -- 4 INCH W.G.

SEALER CLASS ---- LONGITUDINAL & TRANSVERSE

SEALER TYPE ---- ETA GLUE & TAPE

DUCT WRAP ----- 2"      3/4 Lb Blk Fab/Mas

LINER TYPE ----- NONE (Duct sizes shown are 'Free Area')

DUCT JOINT LENGTH 4 Ft

ITEM	W	x	H	FEET	FTGS	ELBOW	TV1	TV2	FIRE DAMPER	FLEX CONN	MANL DAMP
1	6	12		3	1	0	0	0	0	0	0
2	10	10		5	1	3	0	0	0	1	1
3	10	10		5	1	2	0	0	0	0	1
4	12	10		5	2	5	0	1	0	0	0
5	14	10		40	1	2	0	2	0	0	3
6	16	14		6	2	1	0	1	0	0	1
7	12	10		8	1	2	0	0	0	0	1
8	14	10		0	1	1	0	0	0	0	0

- Select printing options
- Go green by selecting only required print or view on screen!

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NEXT



# Zone Input

- Shows your input by zone and is included in sheet metal summary for review
- Your bid solution!

Professional Estimating for HVAC Duct and Pipe

**I Preview**

**ZONE INPUT**

ZONE NAME ----- EXH/SA  
 ZONE OCCURS ----- 1 Time (Quantities below reflect totals for 1 occurrence)  
 FLOOR AREA -----  
 DRAWING NUMBER --  
 DUCT TYPE ----- SHEETMETAL  
 PRESSURE CLASS -- 4 INCH W.G.  
 SEALER CLASS ---- LONGITUDINAL & TRANSVERSE  
 SEALER TYPE ----- FTA GLUE & TAPE  
 DUCT WRAP ----- 2" 3/4 Lb Blk Fab/Mas  
 LINER TYPE ----- NONE (Duct sizes shown are 'Free Area')  
 DUCT JOINT LENGTH 4 Ft

ITEM	W	x	H	FEET	FTGS	ELBOW	TV1	TV2	FIRE DAMPER	FLEX CONN	MANL DAMP
1	6	12		3	1	0	0	0	0	0	0
2	10	10		5	1	3	0	0	0	1	1
3	10	10		5	1	2	0	0	0	0	1
4	12	10		5	2	5	0	1	0	0	0
5	14	10		40	1	2	0	2	0	0	3
6	16	14		6	2	1	0	1	0	0	1
7	12	10		8	1	2	0	0	0	0	1
8	14	10		0	1	1	0	0	0	0	0

SNAPOCK PIPE - SPIRAL PIPE - TYPE B BLUE PIPE  
 4 8 INCH PIPE (SPIRAL)  
 1 8 INCH 45/TAP (SPIRAL)  
 DUCT WRAP: 2" 3/4 Lb Blk Fab/Mas (for Spiral)  
 SPIRAL SEALER TYPE: FTA GLUE & TAPE - TRANSVERSE

**ACCESSORY INPUT**

QTY	DESCRIPTION	LABOR HOURS	MATERIAL COST
Close			

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NEXT

# Sheet Metal Summary

Professional Estimating for HVAC Duct and Pipe						
Sheetmetal Recap						
SHEETMETAL SUMMARY						
STANDARD DUCT						
DUCT	0-12	13-30	31-54	55-84	85+	TOTAL
LINEAR FEET	66	64	0	0	0	130
NET WT OF FITTINGS	197.91 +	29.69 ( 15.00% WASTE) =				227.60
NET WT OF STRAIGHT DUCT	253.68 +	38.05 ( 15.00% WASTE) =				291.73
TOTAL	451.59	67.74				519.33
TOTAL	46.61					
PERCENTAGE OF FITTINGS (W/O WASTE)			43.83%			
WEIGHT PER LINEAR FT OF DUCT (W/O WASTE)			3.47			
	16 GA	18 GA	20 GA	22 GA	24 GA	26 GA 28 GA
SQ FT W/O WASTE	0	0	0	0	0	498 0
WEIGHT W/O WASTE	0	0	0	0	0	452 0
REINFORCEMENT WITH WASTE						
	LBS		FT			
DRIVE	24		116			
TRANSVERSE	42		90			
INTERMEDIATE	0		0			
MATERIAL RECAP						
	\$/UNIT		UNITS			MATL. COST
STRAIGHT DUCT	1.15 LB		291.73 LBS			335.49
FITTINGS	2.35 LB		227.60 LBS			534.86
WRAP 2" 3/4 LB BLK FAB	0.29 SQ FT		851.76 SQ FT			247.01
TURNING VANE, DOUBLE						61.25
Close						

- Provides all relevant data
- Partial recap shown provides breakdown of duct by size and by percentage of fittings.
- Shows quantities by gage
- Provides linear feet of reinforcement. Print detail for complete list
- See product page for complete sheet metal summary

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NEXT



# Pipe Estimating

## Pro-Est Pipe

File Help

Pipe

Job

System

Options

Factors

Input

Recap

Utilities

Job Notes

Excel Jobs

Setup

Close

Job COH 10500 Bellaire

Date 11-17-2010

Estimator RJV

Floor Area

Drawing No

Labor Rate 30.5

HOOKUP

System CW

Pipe Type BLACK IRON PIPING

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- Set up or edit jobs
- Set up or edit system
- Options to change the standard labor rate or select a special labor rate
- Factors provides access to special factors to change labor or material items
- Using Input, select the quantities of items in the current system
- Recap to print or review current job on the screen
- Utilities provides access to take off forms and misc. spread sheets
- Write Job notes as needed
- Excel jobs provides access to recap sheets
- Setup or update material prices or labor productivity factors using Setup

BACK

NEXT

# Utilities

## Professional Estimating for HVAC Duct and Pipe

### Pro-Est Pipe

File Help

#### Pipe

Job	System	Options	Factors	Pipe
Preview	Print Data	Job Notes	Pipe	Hookups
Print	Backup	Close	Hookups	Close
Close	Tools		Close	
Job	Takeoffs	OCHEMICAL COMPANY		
Date	Misc Costs	<input type="checkbox"/>		
Estimator	Water Vol.	<input type="checkbox"/>		
Floor Area	HVAC Tools	<input type="checkbox"/>		
Drawing M	Conversion			
Labor Rat	Close			
System	CHILLED WATER OUTSIDE			
Pipe Type	BLACK IRON PIPING			

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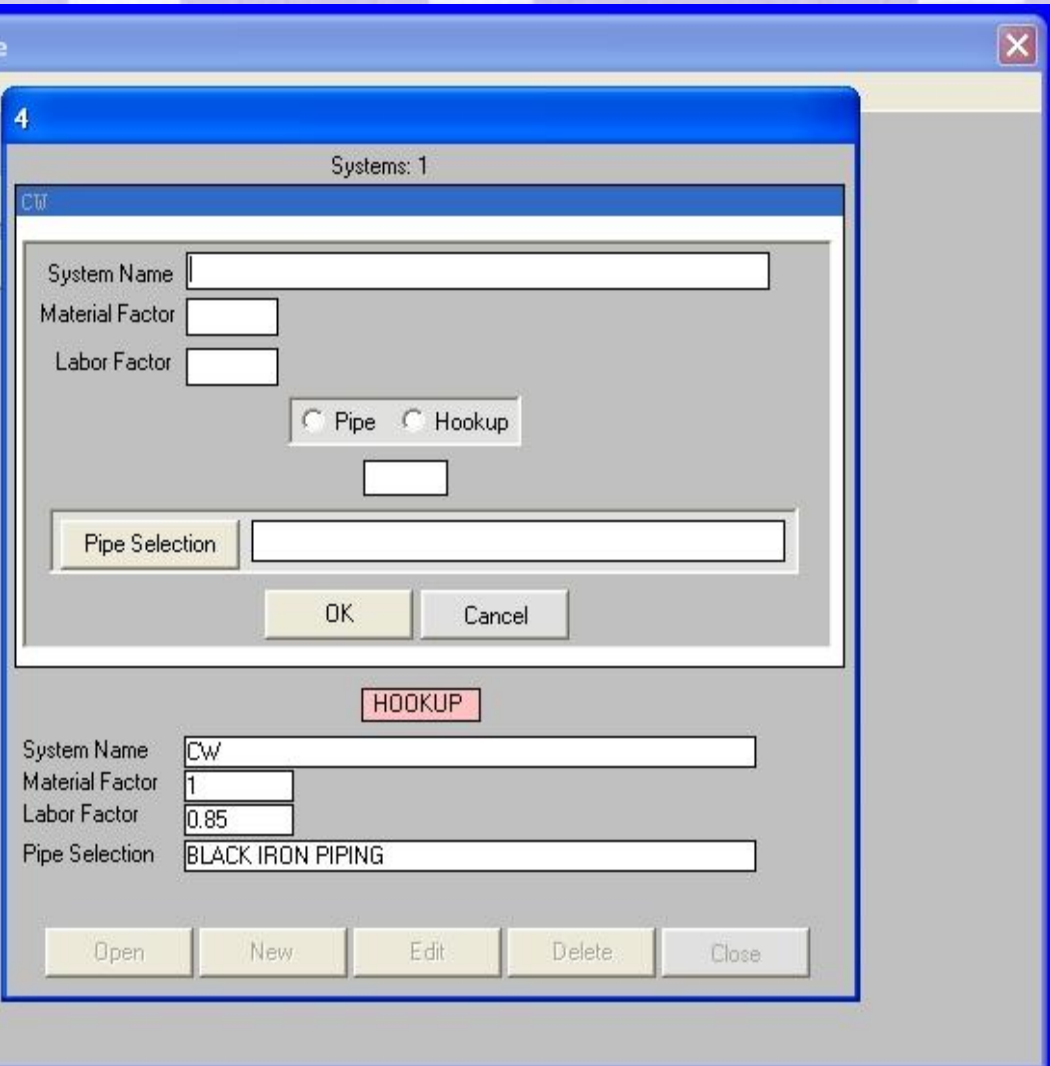
- Opening pipe screen
- Set up new job or system within a job
- Options to change labor rate permanently or for the job
- Factors to update material and labor date
- Print existing data or take off sheets
- Use misc. tools and spread sheets
- Fast, accurate and simple

BACK

NEXT

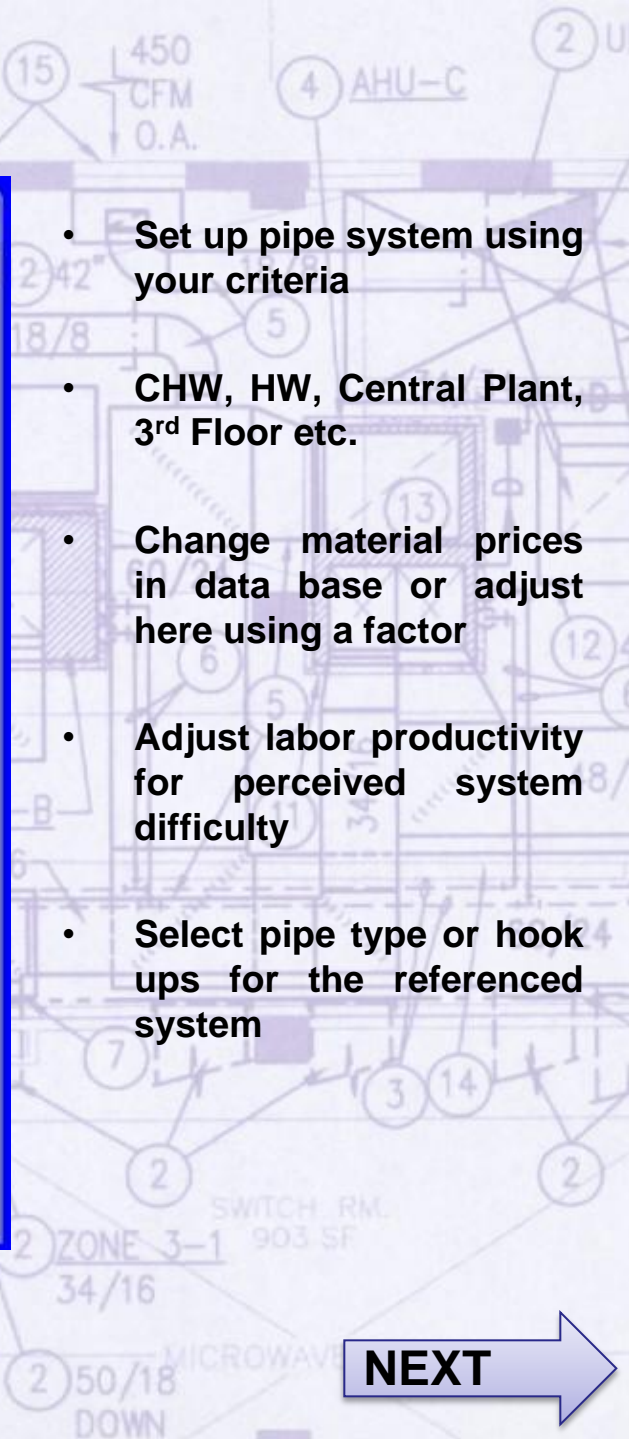



# Pipe System



- Set up pipe system using your criteria
- CHW, HW, Central Plant, 3<sup>rd</sup> Floor etc.
- Change material prices in data base or adjust here using a factor
- Adjust labor productivity for perceived system difficulty
- Select pipe type or hook ups for the referenced system


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- 
- **Set up pipe system using your criteria**
  - **CHW, HW, Central Plant, 3<sup>rd</sup> Floor etc.**
  - **Change material prices in data base or adjust here using a factor**
  - **Adjust labor productivity for perceived system difficulty**
  - **Select pipe type or hook ups for the referenced system**
- 

The screenshot displays the 'Pro-Est Pipe' software window. A dialog box titled 'Systems: 1' is open, showing a list of systems with 'CW' selected. The 'CW' system details are shown below the list:

System Name	Material Factor	Labor Factor	Pipe Selection
CW	1	0.85	BLACK IRON PIPING

At the bottom of the dialog box, there are buttons for 'Open', 'New', 'Edit', 'Delete', and 'Close'. The 'Edit' button is highlighted.



**NEXT**

# Pipe Job Manager

Professional Estimating for HVAC Duct and Pipe

### Pipe Job Manager

Name	Pipe Jobs: 448	Date
COH 10500 Bellaire		11-17-2010
Cy Fair Hospital ICU Unit		11-15-2010
Rice Sewell HW Valve C 0		11-12-2010
Callon Petroleum		11-11-2010
COH-Sagemont Park		11-09-2010
TMC Garage 10		11-04-2010
*test		11-02-2010
TMH Pedestrian Walkway Katy		10-30-2010
Beaumont POB-MRI		10-28-2010
hookok ups		10-26-2010
TMH PO Dept Orthopedics		10-26-2010
TEXAS PETROCHEMICAL COMPANY		10-25-2010
Exportex		10-23-2010
Lamar State College-EWMC-8		10-22-2010
Lamar State College-EWMC-3		10-22-2010
Aldine Goodman Kitchen Reno		10-21-2010

@ Historical Data \* Special Factors

Job Name

Date  Drawing Number

Estimator

Floor Area

Labor Rate

- List of pipe jobs
- Will store up to 1000 jobs
- Sort by job name or date
- All job estimates available at a click.

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NEXT



# Pipe Job Manager

Professional Estimating for HVAC Duct and Pipe

### Pipe Job Manager

Name	Pipe Jobs: 448	Date
COH 10500 Bellaire		11-17-2010
Cy Fair Hospital ICU Unit		11-15-2010
Lamar State College-EWMC-3		10-22-2010
Aldine Goodman Kitchen Reno		10-21-2010

Job Name: COH 10500 Bellaire  
Date: 11-17-2010  
Estimator: RJV  
Floor Area:   
Drawing Number:   
OK Cancel

@ Historical Data ★ Special Factors

Job Name:   
Date:   
Estimator:   
Floor Area:   
Labor Rate:   
Drawing Number:   
Open New Edit Delete Close

- Type name of new pipe job
- Job include current date, floor area, labor rate and drawing number

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NEXT

## Option Section

Professional Estimating for HVAC Duct and Pipe

**Pro-Est Pipe**

File Help

**Pipe**

**Job Labor Rate**

Job: COH 10500 Bellaire

Job = Default Factors

30.50

☒ Default Factors ☐ Special Factors

30.50 30.50

OK

Hookup

System: CW

Pipe Type: BLACK IRON PIPING

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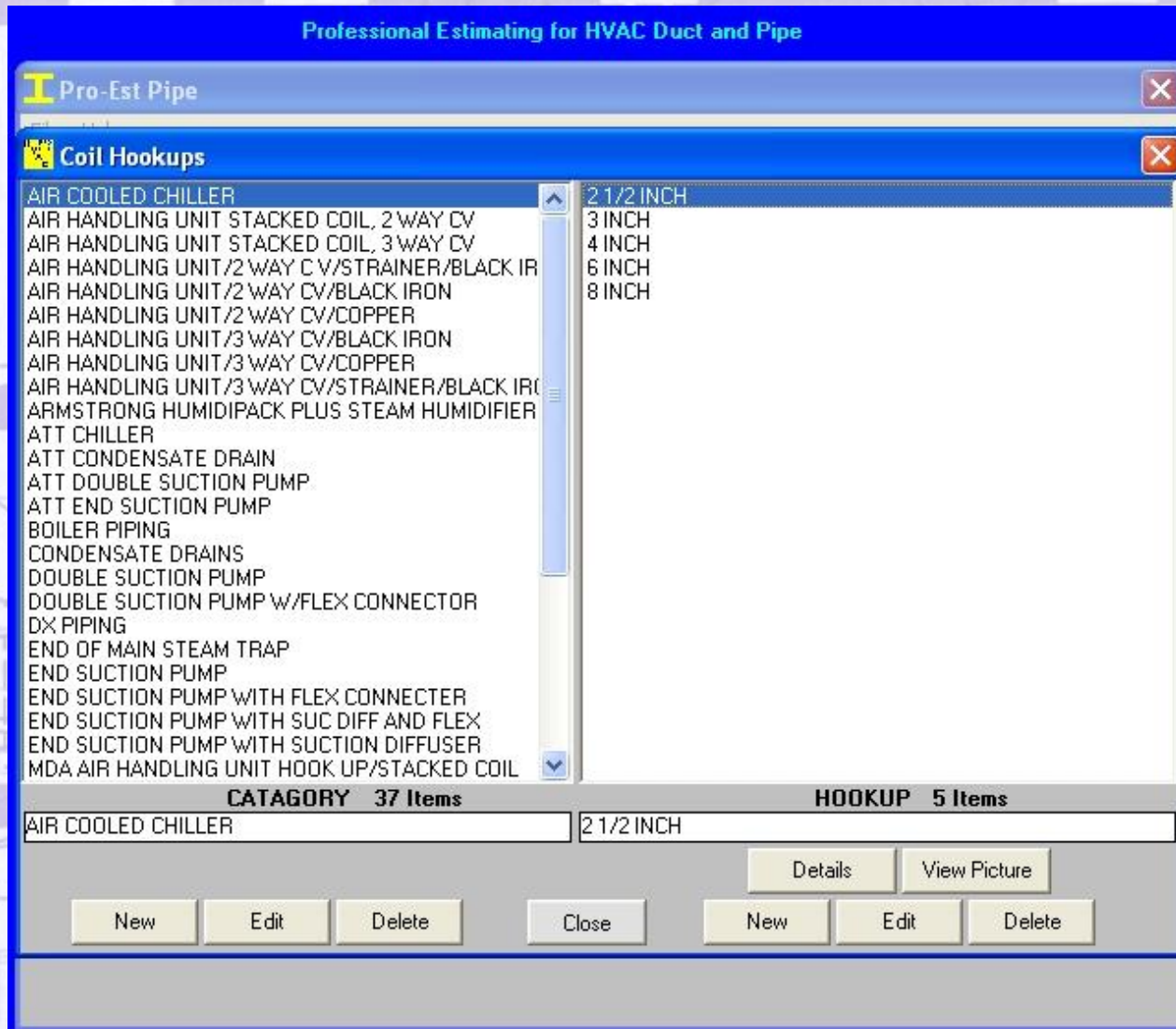
- Change default labor rate
- Special labor rate if required

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NEXT



# Coil Hookups

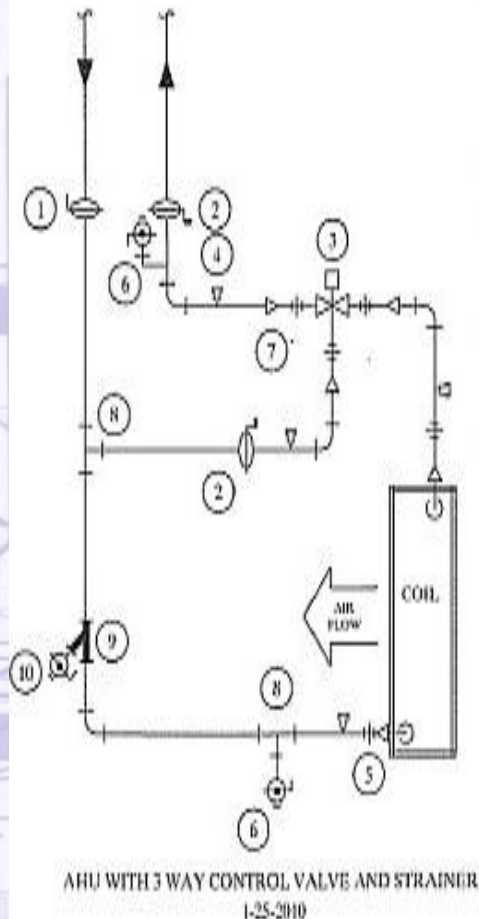


- **Coil Hookups section**
- **Select an item and the size**
- **View both the picture and the details (material list)**
- **250+ pre-installed hookups**
- **Easily Insert you own hook ups and material list**
- **Simple, easy and accurate!**

**BACK**

**NEXT**

# Coil Hookups Details



0100  
CATQORY AIR HANDLING UNIT/3 WAY CV/STRAINER/BLACK IRON  
HOOKUP 2 1/2 INCH/ THREE WAY CONTROL VALVE W/STRAINER  
PIPE BLACK IRON PIPING  
PICTURE AHU W 3WAY CONTROL VALVE AND STRAINER.pdf

QTY	SIZE	ITEM
20	2-1/2	PIPE (ERW)
6	2-1/2	90 ELBOW
1	2-1/2	TEE
5	2-1/2	REDUCING TEE
1	1-1/4	THREADED PLUG
3	2	UNION (250#)
12	2-1/2	FLANGE (WN W/B&G SET
4	1/2	THREADOLET
2	3/4	THREADOLET
1	2-1/2	Y STR KECKLEY STYLE
2	3/4	BALL V NIBCO T-585 W
1	1-1/4	BALL V NIBCO T-585 W
3	2-1/2	BF VALVE (NIBCO LD G
1	2	CONTROL VALVE-3WAY
4		PETES PLUG
2		HOSE ADAPTER

16 Items

- Material list for hookup
- View PDF drawing of hookup
- Print material list and drawings
- Single click - simple user interface
- Saves take off time
- Increases accuracy

BACK

NEXT



# Pipe Items

Professional Estimating for HVAC Duct and Pipe

Pro-Est Pipe

Coil Hookups

QTY	SIZE	ITEM	QTY	SIZE	ITEM
15	4	PIPE (ERW)			
4	4	90 ELBOW			
2	4	REDUCER CONC.			
1	2	BUSHING (2" MPT x 1"			
12	4	FLANGE (WN W/B&G SET			
2	1/2	THREDOLET			
3	3/4	THREDOLET			
1	2	THREDOLET			
2	4	EXPANSION JOINT			
1	3/4	BALL V NIBCO T-585 W			
2	4	BF VALVE (NIBCO LD G			
2		TEST WELL			
2		PETES PLUG			
1		HOSE ADAPTER			

14 Items

Select/Edit

Close

Print

☒ Items

☐ Picture

- 386+ pre-installed steel pipe items.
- Use existing or easily set up your own hookups
- Select or edit pipe items for the hookups
- Easily notice errors compared to manual estimation
- All at a very affordable price

BACK

END