

# *Concerto Estimating*

## General Introduction

This document provides a General Introduction of the various aspects of the Concerto Suite© family of estimating software.

### **What is Concerto?**

Concerto is a set of program modules that provide advanced cost estimating and other functions that flow from the estimate process. It uses a rich product database that assists in quickly and accurately assembling cost estimates for material, labor, and all other cost aspects of a project. Concerto provides detailed breakouts and reports that allow estimators and their management to gain confidence in their estimates, and bid accordingly.

### **Program Structure**

The Concerto program was created to have the ability to combine two important but often conflicting goals:

1. Act as a standalone but fully capable estimating program, while running on a notebook or other non-connected PC.
2. Act as a member of a network so that a master product database can be used to keep various users synchronized and up to date.

### **Main Functions**

There are separate identifiable program functions that manage the use of Concerto:

- Maestro Navigator
- Administration Manager
- Database Manager
- Estimating Module

***Maestro Menu and Access Manager***

The Maestro module is where the program is started up from. It requires a password and user name verification for access.

It also:

- ✓ Supports license transfers
- ✓ Imports and selects the master database to be used
- ✓ Allows password changes
- ✓ Manages projects (electronic job files) for use by the estimating module
- ✓ Selects whether local or remote databases and estimates are to be used.
- ✓ Supports general program maintenance.

***Administration Manager***

Users with an administrative login privilege can prepare the 'site'.

They can:

- ✓ Set up **Cost Templates** that contain the various rates and settings as they apply to all users at the site.
- ✓ Assign new users and their access privileges. Each user can be given specific abilities as determined by management.
- ✓ Set up site-specific lists (employees, product types, contacts, etc).

All administrator-maintained templates, users and settings are distributed throughout the site automatically. Remote (notebook) computers are synchronized when they log into the office network.

***Database Manager***

The "Database Manager" module allows a designated person to maintain the master site database. This database can be automatically distributed to users so all estimators stay in sync. Notebook users are synchronized when they login to the network, or they can be provided with a database file that will be automatically merged onto their PC.

The Database Manager allows you to:

- ✓ Create new databases
- ✓ Edit existing databases
- ✓ Purge old data selectively
- ✓ Merge new data selectively
- ✓ Update pricing and other factors selectively
- ✓ Update single or multiple data fields from Excel

**Estimating Module**

This is the heart of the Concerto program. Major program functions are listed.

**Estimate Templates**

- ✓ All templates created by the site Administrator are automatically inherited by each new estimate, making the creation of a new estimate simple.
- ✓ If appropriate, users can select different templates as conditions warrant.
- ✓ Building type, building height, new vs. retrofit work and distance to the project can be assigned immediately, and the appropriate adjustment factors are applied automatically in accordance with Administrator settings.

Global Adjustment Factors - ABC BUILDING
✕

**abc building**

Building Type

Select Type University

Current Type University

Building Size

300,000 Sq Ft

27,871 m2

	EN	DR	PR	PM	TE	SH	EL	ME
Local proficiency factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Building Retrofit % <span style="border: 1px solid black; padding: 2px;">50</span>	1.10	1.05	1.10	1.10	1.05	1.00	1.01	1.01
Building height-floors <span style="border: 1px solid black; padding: 2px;">6</span>	1.00	1.00	1.00	1.01	1.02	1.00	1.03	1.03
Past experience	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Difficulty	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Large area	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Documentation	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Other <span style="border: 1px solid black; padding: 2px; width: 100px;"></span>	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
<b>Total Global manpower adjustment</b>	1.10	1.05	1.10	1.11	1.07	1.00	1.04	1.04

**Panel Task Redirected**

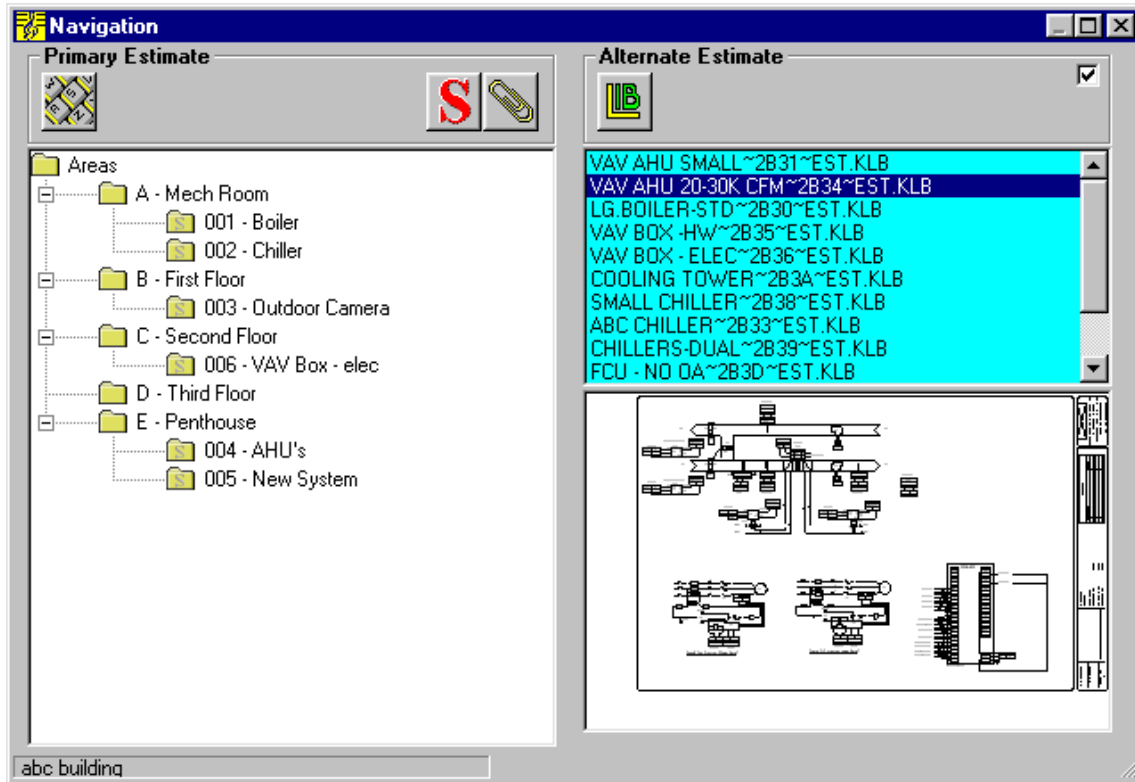
Redirect panel tasks to SH

Redirect panel tasks to TE

Do not redirect panel tasks

**Estimate Structure**

- ✓ Estimates are broken into AREAS -e.g. First Floor, Second Floor, Mech Room,...
- ✓ Areas are further broken into SYSTEMS, e.g. Chiller, Boiler, AHU #6, ..
- ✓ Systems consist of products (items) and assemblies (kits). Both contain all the required material cost and labor information to drive realistic costs.

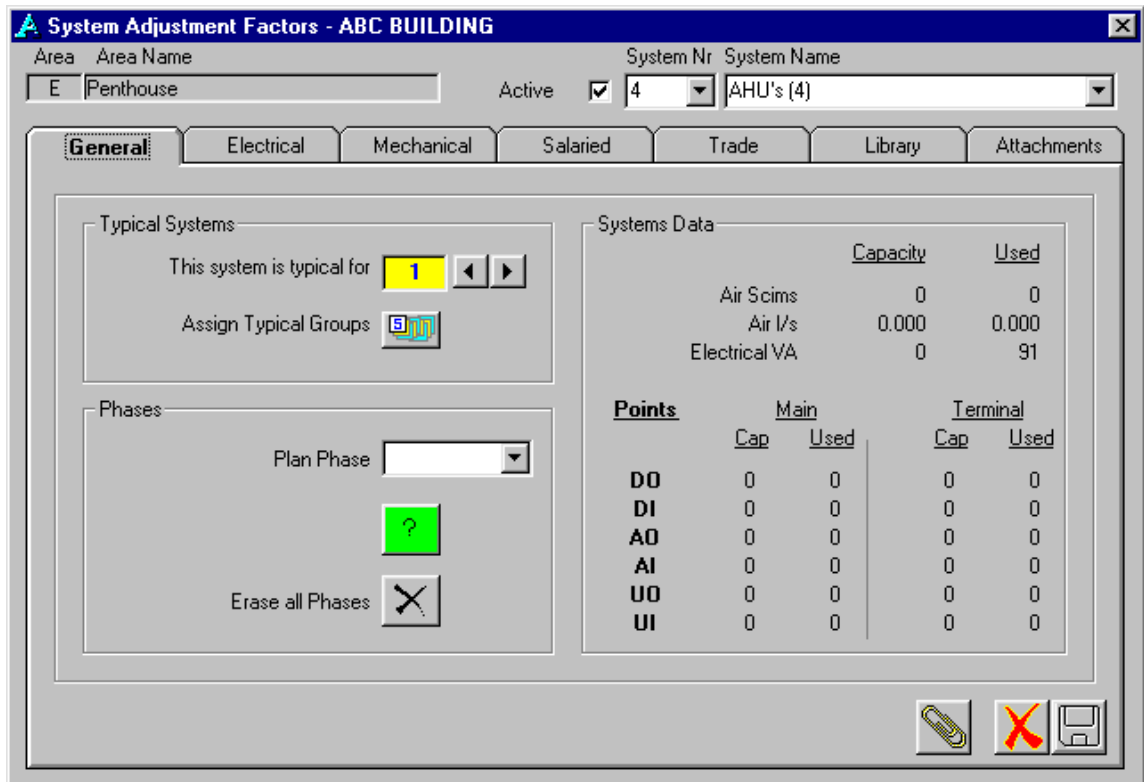


**Estimate Assembly**

- ✓ There are three methods to populate estimated systems:
  1. Using prepared, complete systems out of the site's Standard Library.
  2. Copying complete systems from previously built estimates.
  3. By selecting individual items and kits from the site master database.
- ✓ In addition, within an estimate, complete areas and systems can be copied.
- ✓ Various files (like AutoCAD or Visio drawings, MS WORD sequences of operation, MS Excel schedules, etc) can be attached to systems so they can be provided to the operations department as an estimate 'byproduct'.
- ✓ From any estimate's system, a library 'standard system' can be easily created. This library can contain the standard drawings and other files from which estimates can be assembled quickly and accurately. In addition, after the sale, designs can be based on the estimate, which came from the prepared library standards, and hence may be 90% complete, saving significant design time.
- ✓ Various power features allow users to easily locate items in the database.
- ✓ Valve sizing tools are part of Concerto.
- ✓ Electronic data sheets (PDF) can be popped up for estimated products.

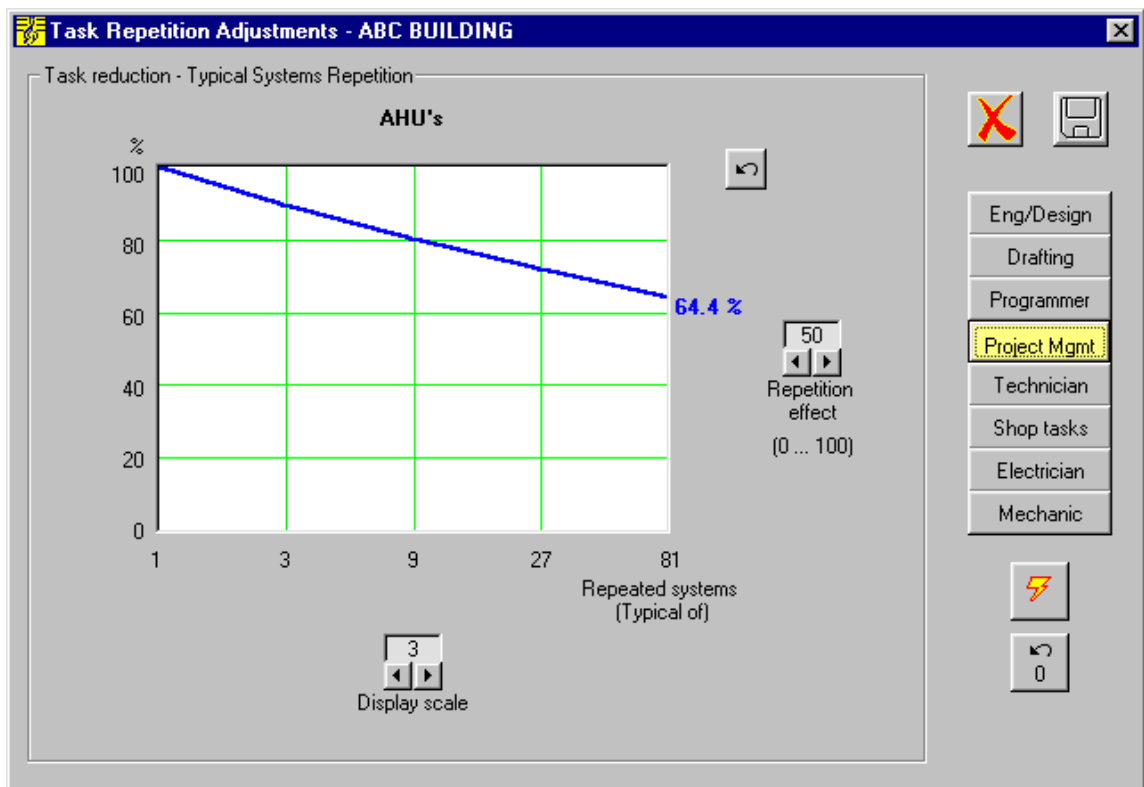
**Estimate Adjustment**

- ✓ Areas and Systems can be temporarily (or permanently) de-activated to observe the effect on the total cost, and to perform "what-if" scenarios or offer alternative pricing to clients.
- ✓ Adjustments can be made by individual area.
- ✓ Adjustments can be made by individual system.
- ✓ Electrical and Mechanical Subcontracting settings can be assigned to arrange all or portions of that work to be subcontracted to others.
- ✓ Subcontracts can be calculated or assigned by system, or globally for the whole estimate.
- ✓ Panel tasks can be assigned to shop personnel that have a lower labor rate, and panel work may reduce the actual task time required (as compared to field mounting).
- ✓ Product discounts are individually adjustable by product line. This enables accurate adjustment of discounts applicable to this job for a particular vendor, when large potential orders warrant a change from the normal discount.
- ✓ Cost escalations on long duration jobs can be easily entered for material and labor.
- ✓ Margins and sell price can be assigned in a number of dynamic ways.
- ✓ Overheads, taxes, various rates are all inherited from administrative templates, but are user adjustable subject to privilege assignments.



**Special Adjustments**

- ✓ Client Adjustments can be assigned to present the estimate with cost numbers that are in line with client expectations. All reports are available while this adjustment applies, hence reports can be shared with clients without displaying sensitive net cost information.
- ✓ Estimates can be updated to current status from the current master database when costs or labor tasks have changed.
- ✓ Estimate costs can be adjusted based on job duration: slower jobs require more project management time.
- ✓ Estimate costs can be adjusted based on job size: very small jobs may require minimums; large jobs enjoy an 'economies of scale' factor.
- ✓ Cobb-Douglas adjustments: (See picture below). When there are many "Typical" systems like VAV Boxes or Heat Pumps, Concerto appropriately recognizes that the repetitive nature of the associated tasks causes people to be more effective, and the estimated time should reflect this efficiency in accordance with Cobb-Douglas scientific principles. Groups of systems (e.g. all VAV boxes regardless of their location in the project) can be treated as a single "super system" for the purposes of this adjustment.



**Estimate Breakouts**

- ✓ A schedule of Values is available, broken out by area and system showing labor, material and subcontract values as well as mobilization costs.
- ✓ Unit pricing breakouts are available, with all associated costs fully loaded into each product.
- ✓ Point Schedule can be produced directly from the estimate or design

**Cost Value Breakouts**

ABC BUILDING

Mode

TC

Breakout Cost Base

Use contract amount  150,143

Use contract sell price  176,949

Unit Pricing Breakout

Produce a list of estimated materials showing sell prices for manpower and material costs.

Schedule of Values Breakout

Project initialization allowances

Mobilization	8			
Submittals	3			
Administration	2			

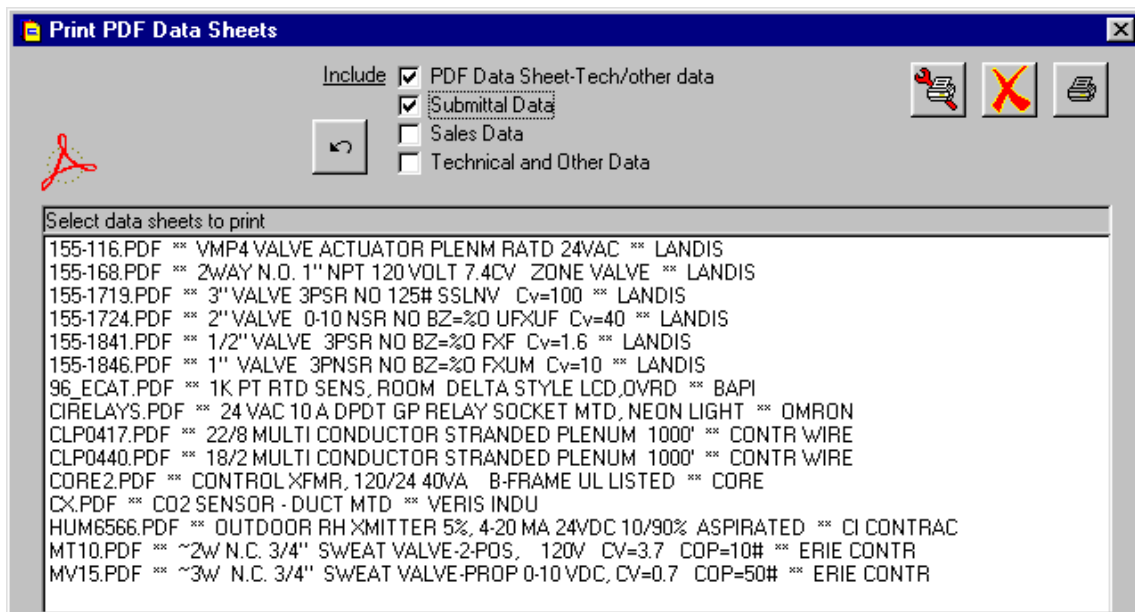
Weights - % of standard

Manpower	Material	Subcontracts	
95	125	105	

**Estimate Information**

- ✓ A dynamic cost summary overview keeps tabs on estimate progress.
- ✓ Dozens of standard reports provide details and summary information that help estimators, operations and management analyze the estimate. Many reports can optionally be printed without cost or labor information, so they can be shared with anyone for equipment list or other purposes.
- ✓ Reports can be converted to a PDF file using standard drivers, so they can be emailed to others.
- ✓ Electronic product data sheets (PDF) can be batch-printed for project submittal purposes. (See picture below)
- ✓ A "black box recorder" tracks global changes made to the estimate, and who made them, providing a time-based analysis of an estimate's cost evolution.
- ✓ Notes can be added at the Global or System level to record ideas, comments and instructions related to the estimate. The notes can be printed.
- ✓ Estimates can be emailed to co-workers.
- ✓ Estimate data can be exported in an MDB format.
- ✓ Estimators can use the "bid day" function to keep track of pricing provided to customers, competitive bid information, etc.

**PDF batch printing:**



**Two Estimates**

When two estimates are simultaneously opened, the user can:

- ✓ Compare the variance between the two estimates, including detailed reports on material, labor and total cost variances. (eg. "estimated" vs "designed")
- ✓ Merge the two estimates
- ✓ Copy complete systems from one estimate to the other.

**Project Booking**

A set of Wizard screens help the user to 'book' the estimate when an order is obtained from the client. It captures:

- ✓ Financial data
- ✓ Contact names
- ✓ Important dates
- ✓ Administrative data such as job numbers, PO numbers, etc
- ✓ Turnover information for communication to Operations
- ✓ Marketing information such as job types, products used, competitor information, systems type and quantity estimated, etc.
- ✓ Bonding information
- ✓ 5 detailed Booking reports are available for administrative use.
- ✓ A detailed export file is available for interfacing with external tools.
- ✓ A booking-related function: estimates can be "disposed of" in the disposition module whether or not they resulted in an order. The data is captured in a single historical record file. Management can later analyze the results of this historical data using the disposition analysis utility to retroactively extract intelligence from past estimates, and apply this knowledge in new projects and bid strategies.

**Sample Wizard Screen (8 of 12)**

8 - Booking A

Warranty and Maintenance

Standard warranty, maintenance  
 Non-standard

2 Years warranty  
 0 Years maintenance

Indicate non-standard items

Sales Credit

Sales ID	% Credit
90011	80
90002	20
	0
	0
	0

Bid Style

Competitive bid  
 Owner negotiated  
 Contractor negotiated  
 Addition to our system  
 We were sole contenders

Billing Mode

Automatic  
 Manual

Explain if billing is manual

Client Taxable?

Yes  
 No

Retention/Holdback

Yes  
 No

10 % Retention

Estimate Status

Preliminary sales estimate  
 Final Sales Estimate  
 Engineered Design  
 Operations Revised

Lic. 111TR999 TC ESTIMATOR abc building

**Licensing Options**

Concerto can be licensed in the following ways:

- Dedicated: The license resides on the PC of a full-time user, often an estimator. Also called a 'single user license'.
- Concurrent: Also called a 'network license'. A license 'dispenser' sits on a network server. It dynamically provides licenses to authorized users. After a user logs out, his license is immediately available to other authorized users.
- Webseats: Acts like a network license, but without the network limitation. An authorized user can pick up a license from the Internet, and return it so it is available for other users. License can be picked up from anywhere in the world with a simple Internet connection. No private information is hosted on the Internet.

**Contact Information**

For additional information and to contact ICS, Visit website

[www.ics-controls.com](http://www.ics-controls.com)