BuilderMT
MANAGEMENT TECHNOLOGY

Please find below a sampling of the various implementation documents and spreadsheets that are part of the Timberline Production Management Solution.

Production Management Implementation Documentation
Table of Contents

The purpose of this documentation is to assist you in organizing and tracking the implementation of the Production Management software solution to help ensure a smooth and successful implementation.

Document Number	Document Purpose
1 Software Purchase Summary	Includes Client contact information, documents date of first client contact by consultant, modules purchased, Consultant assigned and dates
2 Production Management Implementation Meeting	Outline of first implementation meeting, who should Attend and what to expect
3 Production Management Software Application Workflow	PDF document detailing relationship of all products
4 Estimating Implementation Preparation Overview	Outline of critical structure and setup decisions required to construct the Model Options or Detailed Takeoff database
5 Estimating of Model Options Organizational	Detailed example of Model Options database numbering Format system in Excel format
6 Accounting Implementation Preparation Overview	Outline of critical structure and setup decisions required to create an Accounting database. Includes suggested and required setup for interface with Production Management
7 NAHB Standard Cost Codes and Variance Codes	Detailed list of cost codes developed from the NAHB list of cost codes for Homebuilders and Land Developers in Excel format. The second tab is a list of variance category codes also developed from the NAHB list of variance codes
8 NAHB Proposed Chart of Accounts	Detailed list of General Ledger base accounts developed from the NAHB list of Chart of Accounts in Excel format
9 Conversion Template Information	Simplified outline of Master File or setup data that can be converted into the Accounting software
10 Production Mgmt Implementation Overview	Outline of critical structure and setup decisions required to create a Purchasing, Sales Pricing, and Scheduling database
11 Purchase Order Document	PDF format of one style of purchase order

12 Variance Purchase Order Document	PDF format of one style of field variance purchase order
13 Production Mgmt Software Training Schedule	Outline of a recommended training schedule for core products in the Production Management software suite
14 Software Structure Decision Summary	Summary document to organize structure and setup decisions
15 Production Management Implementation Schedule	Summary document listing major milestones, team member responsible for task, date of commencement and completion
16 Production Management Implementation Schedule in Excel	Graphic representation in Excel of implementation timeline
17 Client Profile	List of questions likely to affect the timing and success of the implementation
18 Network Systems Audit	List of questions to identify network and workstation operating environment and any special consideration for running the Production Management software

OVERVIEW

Production Management Implementation Approach

1. *Implementation Timeline Example for Timberline Production Management™ Summary*

Step	Day
1) Pre-implementation Meeting	1
2) Pre-conversion Meeting	2 -13
a) Discuss structural decisions and setup requirements	
i) G/L prefixes and base structure	
ii) Job Cost numbering & cost code schemes	
iii) A/P vendor ID's	
iv) Payroll (if applicable)	
b) Determine data to be converted	
i) G/L	
ii) Job Cost	
iii) A/P	
iv) Payroll (if applicable)	
c) Discuss custom report requirements	
d) Determine magnitude of conversion and refine plan	
e) Install Purchasing (HMS) Software	
i) Ensure proper version of accounting software is in place	
ii) Verify hardware compatibility and capacity	
3) Create Model/Option Data Files in estimating and Begin Input	14
a) Define communities	
b) Define models	
c) Define options	
d) Define pricing	
4) Attend Timberline Production Management™ Training	15 -17
a) Model/Option database	
b) Purchasing (HMS)	
c) Workflow processes	
5) Complete Setup and Input	30 - 60
6) Close month and begin data conversion	61
7) Live on new system	60 - 90
8) Fine tuning workflow procedures, reports, graphs, etc.	91 - 180

2. Training Detail

MEETING 1 - Initial Planning (1-2 Days + Expenses)
Discovery / Project Planning / Database Approach

PLANNING

– Review and/or participate in critical Accounting decisions

- Review Accounting requirements for synchronization with Production Management
- Discuss and/or Develop the Accounting implementation plan
- Present the Production Management implementation plan
- Set dates accordingly

DISCOVERY
- Learn about the company; the team; the products
- Learn about existing Estimating; purchasing; and client business model
- **Learn about client's objectives and vision for the Timberline Production Management solution**

DATABASE
- Discuss terminology; concepts; and estimating data structure
- Formulate a plan for development of the database

[OPTIONAL]
- Load Purchasing (HMS) for use with "Sample Data"

NOTE:
- ✓ *Estimating and Accounting must already be loaded*

TRAINING (2 Days / Key Personnel (Estimating; Purchasing; Accounting))

NOTE:
- ✓ *This is a separate budget item; It is usually done off-site in a classroom setting; If handled on-site, additional cost are involved as additional preparation is necessary; Appropriate facilities / equipment must be available.*

Timberline Estimating (One Day)
- Discuss Data base concepts
- Review Estimating Mechanics (with hands-on exercises)
- Discuss Model / Option database approach and numbering schemes
- Pricing:
  - Differentiate between estimating prices and Purchasing (HMS) prices
  - Discuss Variable pricing by vendor / community
  - Demonstrate multiple pricing approaches
  - Hands-on activities

Purchasing (HMS) Workflow (One Day)
- Review Purchasing (HMS) Concepts and Functionality
- Lot Specific Budgeting
- Purchase Orders
- Approval of Purchase Orders
- Security and System Maintenance
- Interface with the Accounting and Estimating Systems
- Profitability Analysis by Model / Option

MEETING TWO (1.5 - 2 Days; Plus Expenses)
System Load / Continued Training / Begin Pilot Testing

Pre-requisites

- Estimating loaded; Initial (full or partial) copy of client database available
- Accounting program must be installed and a "shell company (or copy of live company) should be available
- ODBC must be purchased and installed
- Key client personnel (Estimating; Purchasing; Accounting) have attended training classes

Meeting objectives

- To install and activate Purchasing (HMS) and synchronize it with Estimating and Accounting
- To test the overall solution using the clients estimating Database
- To prepare the client for continued pilot testing and fine-tuning the database

Specific Activities

- Load and Setup Purchasing (HMS) in network environment
- Test workflow and synchronization with estimating/ Accounting
- Review the estimating Database and Estimating Mechanics with client
- Continued training / review of Production Management concepts and mechanics using client data
- Introduce advanced "Assembly" concepts as necessary
- Begin Pilot Testing and discuss approach for independent activity
- Address any issues that might arise and/or document them for future resolution

MEETING THREE - (1.5 - 2 days)
Operating Procedures / Training / Prep for Live

Pre-requisites

- Database is nearing its final stage
- Pilot testing is nearing its final stage
- Live date is scheduled (within 30 days after this meeting)

Meeting Objectives

- To establish and document post-live operating procedures
- To plan / provide specific training for remaining users
- To discuss final preparation necessary to "go live"
- To provide an overview of the solution to the company at large

Specific Activities

- Review the concepts and mechanics with key project personnel
- Address any open questions or issues
- Meeting with all key personnel (and the Accounting consultant in independent third party)
- Group should include decision makers in Estimating; Purchasing; Accounting
- May include certain key employees that can share current procedures
- **Primary purpose is to flush out existing procedures and discuss the requirement for new procedures in a Production Management/ Accounting environment**
- Deliverable is a high level set of "Operating Procedures" with personnel assignments determined
- Determine which additional employees need to be trained and establish a plan
- May involve on-going training after BuilderMT's departure
- May need to schedule specific sessions with key personnel at this time
- Meet with key project personnel to review status and establish final requirements and approach before going live. Establish projected live date.

Operating Procedures/ Training / Prep for Live

- [Optional] Meeting(s) to provide an overview of the solution to other interested parties
- Sales; Estimating; Purchasing; Accounting; Field representatives; Management
- Optionally: Subcontractors; Suppliers; Administrative Personnel

MEETING 4 (1 – 2 Days)
Transition to Live

Specific Activities:
- Assist with last minute start-up and beginning balance tasks
  - Assist with establishing budgets for Open Jobs
  - Assist with the generation of open purchase orders
- Provide user Estimating and Production Management support as necessary
- Address any final issues regarding the accounting interface
- Assist with Accounting Support as necessary
- Close with a Team meeting to make sure there are no outstanding issues that need to be addressed. If any, specifically plan for Resolution.

FOLLOW UP MEETINGS - Ongoing Improvements (TBD)

It is Builder MT's primary goal to establish a mindset in your organization that fosters the principle of

"continual improvement". As such, we encourage you to consider appropriate follow-up sessions in a

"Post Implementation" setting to discuss any relevant business issues.

It is our hope that your team will fine-tune your use of the powerful tools made available with the Estimating / Production Management/ Accounting solution. We also encourage you to consider ancillary solutions that are available in today's market, such as "sales

front-end" software that integrates with Production Management. We would be pleased to participate in such endeavors.

Examples of these opportunities are as follows:

− Further use of the Timberine Estimating product to produce more accurate / detailed estimates
− Better use of the overall solution to better communicate your selections / options to the suppliers and subcontractors.
− Integration with Sales Center Software.
− Integration with Production Scheduling.
− Assist in addressing other specific client business needs

Providing advanced technology and a state-of-the-art solution in the Home Building industry is our business. Together, we can make the industry a more profitable, better controlled, more efficient, and even an enjoyable experience. Just let us know how we can help.

3. Check List –for Going Live with Production Management

DATABASE & PRICES:

Is the Database Ready?
__	Appropriate assemblies exist (Models / Plan Options / Global Options)
__	The appropriate assemblies have been checked for the right "items" and quantities
__	You have added any necessary logic to select or ignore certain items, or develop the appropriate quantities (Optional)
__	Are you sure that all items have been assigned to the appropriate Material Class?

Have Prices been updated in Purchasing (HMS)?
__	Lump Sum Bids (Models / Options / Global Options)
__	Unit Priced and Detail Items

Are you comfortable maintaining prices?
__	Change/Add prices for individual items?
__	Know how to electronically update prices for a specific Supplier/Subcontractor?
__	Know how to electronically update prices for a specific Model or set of Options?

Are you comfortable maintaining the Timberline Estimating Database?
__	Can you add Phases and Items?
__	Know how to assign those items to a "Material Class" (See Bill of Materials)?
__	You can create or modify assemblies
	.	Add / Delete Items
	.	Modify the quantities
	.	Develop Calculations (Item selection; Quantity)

__ Know how to renumber Phases/Items/Assemblies
__ Know how to Add or modify Material Classes
        -        Including the step in Purchasing (HMS) "PO Defaults"
__ Know how to change an items assigned "Material Class"?

DEVELOPING AN ESTIMATE:

Are your comfortable with Estimating Take-off Mechanics
__ Do you know which estimate "header" information you need to add?
        .   Job Classification? Main Tab? Other?
__ Do you know how to do an "Assembly Take-off"
__ Do you know how to change the "Spreadsheet Layout"?
__ Do you understand the "Edit Options" function in Estimating?

BEGINNING BALANCES – Budgets / Open PO's:

Will you use Purchasing (HMS) to develop initial estimates in Job Cost?
-        If so, are you comfortable with the procedure to do so?

Have you decided which jobs will have "Open PO's"?
-        If so, do you know how to develop open PO's and discard paid or invoiced PO's

Have you set the schedule of Activities (See Below for Sample)?

CONVERSION FROM "Pilot Test" to "Live" Purchasing (HMS) Database

Has your LIVE Purchasing (HMS) Database been established and setup properly?

Have you established your PO Format?

Do you have Appropriate Categories in the LIVE Timberline Accounting Data
        -        S, L, M, O
        -        CO (Change Orders); VPO's (Variance Reason Codes)

Do you have the appropriate Cost Codes in the LIVE Timberline Accounting Data

Are the HMS Settings the same as your final "Pilot Test" settings?

Have you synchronized with the live Timberline Accounting Data?
.   Jobs; Vendors; Cost Codes; Categories; Etc

Are your PO Defaults finalized (and all areas established)?

Purchasing (HMS) / ACCOUNTING IMPORT READINESS

Do you know how to do the following:

__ Issues Budgets?

__	Enter Selling Prices?
__	Issue Purchase Orders and Print them?
__	Approve Payment of Purchase Orders?
__	Import Estimates into Accounting
__	Import Commitments into Accounting
__	Import Invoices into Accounting
__	Understand how to deal with "Reject Files" when necessary
__	Process change orders for: A simple variance? An added or deleted option?

PROCEDURES:

Have you thought through the new procedures and paperwork? (Who/What/When/How?)

.   Database maintenance
.   Developing budgets
.   Finalizing the Vendors/Pricing before PO Release
.   Maintaining the Contract Prices (Model/Options) per Lot
.   Issuing the PO's
.   Gaining authorization to pay
.   Approving payment of PO's
.   Importing appropriate files
.   Special Situations
    -       Vendor Changed
    -       Price Changed
    -       Additional Work Authorized
    -       Partial Payments
.   Know which paperwork to print and distribute?
.   Know which reports to use, and when?

ARE YOU READY????

PRODUCTION MANAGEMENT
Implementation Meeting

This document outlines the information that will be discussed during the Production Management Implementation Meeting. This meeting will focus on the critical elements of Planning, Training, On-site Support, Webex support and coordination with Timberline's Estimating and Accounting software.

I.   The Planning Meeting

A.   Who should attend

       Participants in this meeting should be
1. Accounting Department (CFO/Controller)
2. Estimating/Purchasing (Manager)
3. Owner, Project Sponsor, or other main decision makers

B.   What to expect
1. Identify Client Project Leader
2. Identify other Client key players
3. Identify Consultant team
4. General overview or review of the Production Management system
5. Estimating software structure decision defined
6. Accounting software structure decisions defined
7. Purchasing software structure decisions defined
8. Define timeline for all tasks
9. Assign tasks to team members
10. Review training schedule

C.   Classroom Training Opportunity   Date:_____
                                              Date:_____

D.   Onsite Training   Date:_____
                                              Date:_____
                                              Date:_____
                                              Date:_____

Implementation Preparation Overview

<u>Production Management</u>

This document identifies topic what will be discussed in the Production Management portion of the Implementation Meeting. A review of this document prior to the Implementation Meeting will be beneficial in educating you on key Production Management software concepts and decisions

I.   Purchasing (HMS)

In the Implementation Meeting we will discuss:

A.   Product Integration Review / Workflow Demonstration
B.   Accounting Software Design Review
C.   Estimating Software / Database Design Review
D.   Purchase Order Modification
E.   Reporting Requirements
F.   Purchase Order Issue Procedure
G.   Variance PO Procedure/Field PO
H.   Buyer Selection / Change Order Process

Product Integration Review / Workflow Demonstration

The Purchasing software requires minimal manual setup. Most setup in the Purchasing software is data provided from

Timberline Estimating and Timberline Accounting packages. A correct and thorough setup of the Timberline products

is key to a successful Purchasing software implementation.

Accounting Software Design

Covered previously in Implementation Meeting

Estimating Software / Database Design Review

Covered previously in Implementation Meeting

Purchase Order Modification

The default Purchase Order design is installed with the Purchasing software. An alternate design is also provided in a CustomHMS folder during the installation. The Purchase Order document can be modified for header and footer

layout, and can also include your company logo and other user specified information such as community name, plan ID, elevation selection, and garage swing.

Reporting Requirements

The Purchasing software default reports are mainly for the purpose of tracking by lot or job, the purchase orders issued, purchase orders approved for payment, and purchase orders remaining to be approved. Management or analysis reports for Budget to Actual information, variance trends, or profitability analysis are generated and printed from the Timberline Accounting Software.

During the Purchasing software installation, customized reports install with the Purchasing software report templates. In addition to the standard reports on the Purchasing software menu set, additional custom reports are available in the CustomHMS folder and can be added to your menu set and customized. Additional Timberline Accounting software reports are available in the Accounting folder and can be added to your menu set and customized.

Purchase Order Issue Procedure

The purpose of this section is to assist you in defining and documenting the flow of data through the Purchasing software.

Variance Purchase Order Procedure / Field Purchase Orders

1. Review and document current procedure
2. Identify manual touchpoints, i.e., Sales Contract, Field Variance Purchase Order

Buyer Selection and Change Order Process
1. Review and document current procedure
2. Identify manual touchpoints

II. Sales Pricing Module

The Sales Pricing Module (SIM) is designed to calculate retail sales prices for all plans and option by community.

SIM utilizes assemblies or template estimates from Timberline's Estimating software and current default suppliers and

prices from the Purchasing software.

NOTE: It is strongly recommended the Purchasing Software setup be complete, tested, and functioning properly prior to SIM setup.

A. Option Categories

B. Option Types

C. Plan Types

D. Cutoff Phases

III.   Production Scheduling

Production Scheduling is designed to provide a tracking and scheduling alert system for each job or lot. The scheduling software can be customized for major milestone tracking and for individual activities that require an action. With the use of the Palm technology, completed activities can automatically update the Purchase Order status in the Purchasing software for quick approval and payment.

A. Setup Security

B. Setup Divisions

C. Milestones

D. Scheduling Activities

E. Trades

F. Trade Supplier Assignments

G. Schedules