

n experienced tradesman is usually more productive than a guy who's just starting out. Not only does he know more about building, but he has systems for tasks he does on a regular basis. If the boss asks him

by Rob Boram

to hang a door, he knows which tools he needs and can picture every step it takes to complete the job. The guys

who manage construction projects are in the same boat. The ones who have a system have a good shot at bringing jobs in on time and under budget. But people who manage haphazardly receive a lot of unwelcome surprises and almost never make schedule or budget.

Every one of our jobs is managed by a lead carpenter who swings a hammer and supervises subs. Our guys are able to wear both hats because we've created procedures that provide a framework for managing jobs.

Job Folder

At the beginning of every project, we give the lead carpenter a job folder containing information needed to run the job. The folder contains plans, specs, and a detailed cost estimate. It also has phone numbers for subs and suppliers, as well as for the police, fire department, and the local emergency room. We work in three different states — Ohio, Pennsylvania, and West Virginia — so having a comprehensive list of phone numbers is important.

If budget and schedule are destinations, your management system is the road map

The Lead Man Folder

Each lead carpenter also has a Lead Man Folder. Unlike job folders, these aren't linked to a specific project, but go with the lead man from job to job. The folder is actually a large binder filled with clear plastic sleeves that contain items like the company's contractor license, a copy of the change-order policy, change-order forms, message reply forms, and a weekly planner form. The binder also includes a company policy manual and a section outlining our standard construction details.

Weekly planner. Every Friday afternoon, the lead men turn in a completed planner form for the coming week. There's a

ROB BORAM CONSTRUCTION

Name	9	Date				
Full N Signa	lame ture					
Lunch	Start Time	Finish Time				
DO IT RIGHT THE FIRST TIME						
Total	Hours					
80						
380	Tear Out					
840						
	Concrete					
	Foundation					
	Masonry					
	1st Floor System					
1560						
1565						
1570						
1600						
1610	2nd Exterior Wall					
1620						
	Roof Framing					
1670						
1700						
1710	Decks					
2000	Insulation					
2050						
2420	Exterior Doors					
2430	Interior Doors					
2520	Windows					
2680						
2702	Millwork					
2710						
	Finish Stairs					
2810						
2840						
2880	'					
2900	Soffit & Fascia					
3130	Drywall					
3151	Ceilings					
3170	Interior Painting					
3180	Exterior Painting					
3230	Floor Covering					
3250	Interior Staining					
3260	Exterior Staining					
3310	Tile					
3380	Special Ties					
3420	Bath Accessories					
3560	Plumbing					
3760	Electrical					
3880	HVAC					
4000	Clean Up					
4020	Dump Run					
4040						
4060						
4140	Punchlist					

INJURY REPORT: Did you get hurt or see someone get hurt? (PLEASE CIRCLE ONE)				
Who:				
Where:				
When:				
How:				
Mileage Report				
Destination	Date	Mileage		

Every employee turns in a separate time card for each day worked. On the front, hours are posted to job-cost work codes; the back (above) provides space to report job-site accidents.

space for each day of the week, which the carpenter fills in with a list of what he and the other people on the job plan to do that day. The simple act of completing the form ensures that some kind of plan is in place at the beginning of each week.

Time cards. Every Monday lead men are given time cards for that week. Cards are preprinted with the job, employee name, date, and day of the week. Date and day of the week are included because there's a card for each day of the week. (A carpenter working a regular week turns in five cards.) The front side of the card has a list of codes for various work operations and blank spaces to record time spent on those tasks. On the back of the card is a place to record reimbursable mileage and a daily accident report.

The employee is required to sign a statement on the back of the card saying that he did or didn't witness an accident that day. If he did, he's supposed to write a description of what happened. A comp claim is legitimate if someone hurts himself on Friday, but doesn't realize how bad it is till Saturday. What you don't want is someone filing a claim on Monday for an injury he says he got the previous week but that really happened when he was bungee jumping or working a side job over the weekend. Requiring people to report accidents on a daily basis makes it easier to separate legitimate claims from phony ones.

Time log. Lead carpenters are required to keep a log of who's working on their projects on any given day. Helpers go from

project to project, so the information in the log helps to verify how many hours the helper actually worked each week. It's also a record of which carpenters and subs worked which jobs, and when.

Message reply forms. Our company does remodeling, but that doesn't mean clients are always around when we need them. At the beginning of every job we designate a particular location as a message center. Usually, it's a clipboard or bulletin board near the phone. When the lead carpenter wants to pass a message to the client, he leaves it at the message center. Likewise, the client can do the same to get in touch with the lead man. Lead men are required to write messages on a triplicate form we get from NEBS (500 Main St., Groton, MA 01471; 800/225-6380). The client gets the original, a copy is sent to our office, and the lead man keeps one for his records. Copies are important because we want to be able to verify who said what and when they said it. It's hard for clients to claim you didn't tell them about something when you can produce dated copies of messages you sent them. Likewise, it's tough for them to say they didn't agree to something when you've got a note in their handwriting saying they did. We don't save messages so we can wave them in front of clients like Perry Mason would, but we think it's important to document communications because customers don't always remember exactly what you told them or what they told you.

Change-order policy form. Every lead man has a copy of our change-order policy in his binder. Lead carpenters are allowed to handle small change orders in the field. The lead man estimates the cost of the change and has the client sign a change order before proceeding with the work. Processing small changes in the field helps to move the job along, but our lead guys don't have time to estimate the cost of large or complicated changes. When the cost of a change is likely to exceed \$500, the lead man asks the client to call the office for the estimate. Also included in the policy sheet are the hourly rates charged for lead carpenters and helpers.

Punchlist Forms

Our company has two kinds of punchlist forms, the preclose-in punchlist form and the final punchlist form.

Preclose-in punchlist. The preclose-in form is a standard checklist of details to look for before we hang the drywall. The lead man walks the job to verify that items such as lights, receptacles, vents, and pipes are properly located in the wall. In some cases, we ask the client to accompany the lead man when he does the inspection. We tell them that if they want to add an outlet or move a vent or fixture, now's the time to do it, because after the drywall is up it will cost them a lot more to make changes.

Final punchlist. When the project reaches the point where we believe it's substantially complete, we meet with the owner and fill out the final punchlist. The job is substantially com-

ROB BORAM CONSTRUCTION ADDENDUM TO CONTRACT PROPOSAL CHANGE ORDER POLICY

- The Company policy on Change Orders is that any changes will be priced according to Contractor's normal pricing policy and will also include an administrative charge of \$50 to compensate the Company for time lost, scheduling changes and other
- However, there will be no administrative charge for changes caused by unforeseen conditions or beyond the control of the client. These will be charged at the Company's
- Carpenter labor will be charged at an hourly rate of:
 \$23.00 per man hour

General labor will be charged at an hourly rate of \$17.00 per man hour

4. All change orders must be completed in writing with signatures of both client and Contractor's representative. All change orders will be priced prior to start of work or completion of the extra work. For changes costing over \$5.00, a partial payment of the change order.

Company Representative:		
Owner's Acceptance:	-	
Acceptance:	The second secon	
Date:		
,		

Lead carpenters use this form to write change orders on the spot for additional work valued at less than \$500.

plete when the part of the building we're working on is ready to occupy. In most cases, that means it's 99.9% finished. Our contracts specify that when the job is substantially complete, we're to receive the final 10% payment less twice the value of the items on the punchlist. The client has every right to expect us to bring the project to 100% completion, but it's unreasonable for them to withhold 10% of the contract just because \$75 worth of cabinet knobs are on back order.

The way we do it, we get most of what's coming to us, plus the client's protected because he's holding twice the amount needed to fix the items on the punchlist should we fail to perform.

At the preconstruction meeting, we tell clients our office will issue a certificate of substantial completion in exchange for the final payment. Throughout the job, we tell the client that the thing the lead man is working towards is the issuance of the substantial completion certificate. The certificate has no legal standing, but it's a reminder to the clients that they agreed to our payment terms before we started the job. We rarely issue the certificate, because clients usually pay up without a big fuss. It only comes up when we're having a hard time getting that last big check. In 20 years in the business, there were only two jobs where I failed to collect everything that was owed to me.



The Contractor considers the work on your project to be substantially complete in that it is suitable for the Owner to use for its intended purpose. The date of this certificate shall be the date of commencement of all warranties and shall be considered as approval for application for final payment as set forth in the Contract. This certificate does not relieve the Contractor from any obligation of the Contract.

ZIP CODE

(= Value x 2)

Work yet to be compete	100
and the second s	
the annual control of the second seco	
	Total

Any additional request for service should be made in writing. If you feel there are any deficiencies, please be as specific as possible about the defects. Any claim concerning materials under warranty should be made directly to the manufacturer.

under warranty should be made directly to the distribution of the line of the work performed and find the job completed to our satisfaction with the exception of the items listed above as yet to be completed.

exception	Date
Company Representative:	Date
Owner:	Date

536 Charles St., Wellsburg, W.V. 20070 • Tel: (504) 737-1005 • Fax: (304) 737-4282

To ensure that clients cannot withhold final payment because a handful of small items are incomplete, lead carpenters list punchlist items at twice their value on this standard form.

Book of Standards

NAME

ADDRESS _ _ _ -

As our company grew, we began to have internal conflicts about the best way to build things. Carpenters came onto jobs that were underway and complained that blocking was missing or not where they thought it should be. Since blueprints never tell you 100% of what you need to know, field guys were constantly calling me with questions like where to mount grab bars and toilet paper holders or at what height to install closet rods. One of our carpenters said we could solve this problem by creating our own set of standard construction details. Everyone agreed this was a good idea, so we began putting together a set of construction standards.

The first thing that went into the standards were articles I'd clipped from various trade magazines. One showed several different ways to install flashing, and another was a kitchen and bath design checklist. The checklist gave standards for the heights and depths for countertops, heights of toe kicks and backsplashes, and the distance between island and perimeter



Company policies, standard forms, and construction details are carried from job to job in a three-ring binder.

cabinets. Our lead carpenters consult the list when they're checking the kitchen designer's plans for errors and omissions. If something seems out of whack, they call the designer for an explanation.

Our construction standards contain a number of building sections lead men can refer to when they're unsure about the best way to detail something. We took some of the section drawings from trade magazines; others were generated by our designer. If the lead carpenter wants to know the best way to detail brick or stucco veneer on a wood-frame building, he can look it up in the book. When he's not sure about where to place rebar in a monolithic slab or whether or not to vent a crawlspace, he can look that up, too.

Prehung exterior door units often come with an extra-long screw to shoot through the upper hinge

and into the jack stud. The screw keeps the door from sagging, so when we created our standards, we decided that every door should get a king-size screw through the upper hinge. We also specify where to shim and nail jambs and how big the gaps under doors should be.

In the past, a lot of time was wasted on calls between office and site regarding the location of bath accessories. Based on what we know of kitchen and bath industry standards, we created our own standards for locating bath accessories. For example, grab bars should be set 29 to 36 inches off the floor. Owners are free to ask for something different, but when they express no preference, we install them 32 inches above the floor. We have similar standards for the heights of shelves and clothes rods in closets. If the lead man wants to know how high to set a fixed shelf in a base cabinet, he can find that information in the standards, too.

Just because we have a set of standards doesn't mean everything we build is exactly alike. When we're deciding how to build something, we try to select details that are appropriate to the design and budget of the project. Our standards aren't so much a set of rules as they are an on-site library of good building practice.

Rob Boram is the owner of Rob Boram Construction, a remodeling company in Wellsburg, W. Va.

NARI