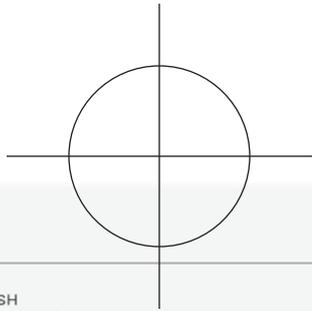
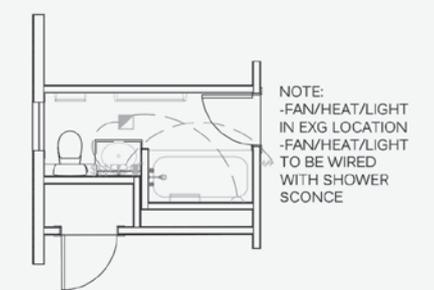
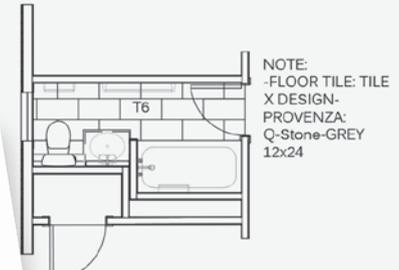
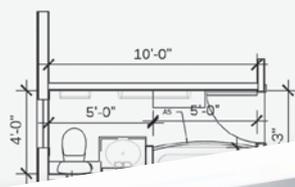


WRITING

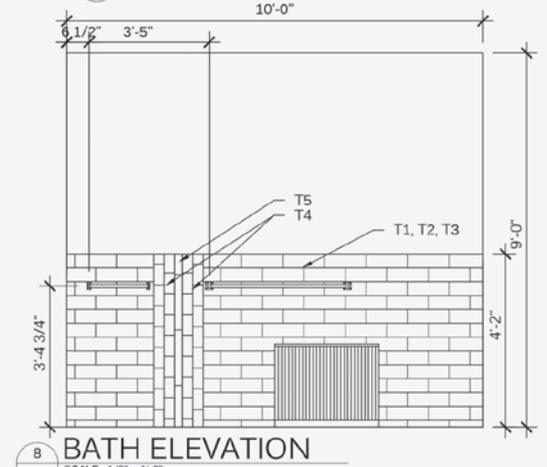
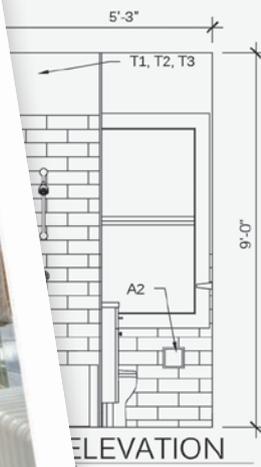


ALL PLANS DIMENSIONED FROM FINISH TO FINISH
 DIMENSIONED PLANS DIMENSIONED FROM FRAMING TO FRAMING
 Hatched areas TO BE REMOVED OR MODIFIED



BATH TILE DESIGN
 SCALE: 1/4" = 1'-0"

4 ELECTRICAL PLAN
 SCALE: 1/4" = 1'-0"



LIGHTING SCHEDULE					
MODEL #	SIZE	HGT/CTR	FINISH	NOTES	
LYNZIE P2605-15	14 1/2" x 11 1/4" x 5 3/8"	7'-5" AFF, CENTERED ABOVE VANITY	POLISHED CHROME/GLASS		
#8802-144	12 x 1 3/4" x 4 1/2"	56" OFF. CENTERED ON ACCENT TILE	STAINLESS STEEL		

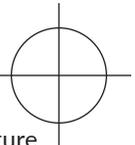
ACCESSORIES SCHEDULE					
MANUFACTURER	MODEL #	SIZE	HGT/CTR	FINISH	NOTES
NEST	CUSTOM	APPROXIMATE 25 3/4" x 50"H, 5"D	BOTTOM STARTS ONE ROW INTO WALL TILE	STAINED ALDER/MIRROR	R.O.
OWNER'S SUPPLY		6.575 x 6 x 2.75	2'-4" AFF	STAINLESS STEEL	
KOHLER	#K-13495-G	7 1/2" x 5 1/2" x 8 1/2"	58" AFF	BRUSHED CHROME	
NEST	CUSTOM	APPROXIMATE 34"H, 25 3/4" x 24"D		STAINED ALDER	
FURNITURE HARDWARE	#911700	60"	76" OFF	BRUSHED NICKEL	
KOHLER	#K-13493-G		70" OFF	BRUSHED CHROME	BACK OF DOOR

In some cases, specs are separate documents detailing product choices and installation practices. In other instances, the remodeler will put as much product info as will fit on the blueprints. This example is from Otagawa-Anschel Design+Build, in Minneapolis.

SPECS RIGHT

THESE DOCUMENTS HAVE A BIG IMPACT ON A REMODELER'S PROFIT. HERE ARE SOME GUIDELINES TO MAKE SURE THEY'RE CORRECT.

BY CHARLIE WARDELL



A set of detailed project specifications, or specs, save time, money, and aggravation by ensuring that everyone works off the same page. They show clients exactly what to expect, and they make pricing more accurate.

Remodelers who write detailed specs couldn't imagine working without them. "Costs on our last 35 jobs were within 0.82 percent of estimate and our change orders are consistently just 2 or 3 percent of annual volume," says Paul Eldrenkamp, owner of Byggmeister, a design/build firm in the Boston area. He adds that it's his company's detailed specs that have made the difference.

So why do so many remodelers fail to write good specs? The answers include misunderstanding about how to do them right and concern that putting in enough detail will take too long.



SPEC-WRITING DETAILS

Effective specs encompass every important feature and product on the job. Remodelers new to spec writing usually start small by defining critical products for client approval and processes that they need workers to do a certain way.

"Good specs don't have to be long," says Michael Ansel, principal of Otogawa-Ansel Design+Build, in Minneapolis. "But," he adds, "they do need to include the critical components you need people not to screw up." It's important to provide a lot of detail in those areas,

such as plumbing and electrical work. For example, some remodelers merely write "electrical to code," and list the type and color of switches and outlets on the plans, figuring that's enough information. But that can lead to problems down the road. "If you specify a light switch with no additional information, you risk having the customers get upset when you tell them that the stainless steel outlet covers they want are going to cost an extra \$4 apiece," Ansel says.

A better spec, he explains, would be something like, "Four almond-colored duplex GFCI receptacles installed in a vertical orientation with white plastic outlet covers." If the customer wants an extra outlet or a different type of cover, it's clear that they need to get a change order from you.

Or take the example of bathroom plumbing fixtures.

A vague spec for a master bath might be as follows:

- Sink type: Kohler vanity sink
- Sink color: Beige-white
- Faucet: Delta
- Faucet finish: Standard
- Dimensions of sink placement in countertop: Centered

A better spec would be:

- Sink: Kohler Tresham K-2979-8-0 vitreous china vanity top with integral sink
- Vanity top height: 32 inches above the finish floor
- Color: Biscuit
- 8-inch center faucet holes

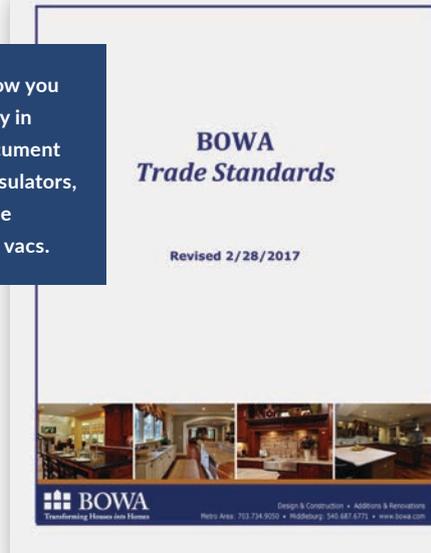
- \$400 allowance for bath fixture
- Sink location will be per cabinet plan on page P3 of the blueprints

"You want to write the spec so the owners can't argue with you about what sink to use or where to place it," says Dennis Dixon, a remodeler, author, and consultant based in Flagstaff, Ariz.

Specs are also helpful in setting expectations for subcontractors. A set of standard practices for your trades will spell out critical details on every project. These may include visuals to help installers correctly complete critical parts of the job, such as instructions from the DuPont website on how to flash a window and integrate it with the Tyvek housewrap, says Doug Horgan, VP of best practices with BOWA, in McLean, Va. "Rather than just specifying the type of window flashing, we include the drawings to show how we want it done," he says.

It's especially important to clearly define any one part of the job that will affect another. For instance, Shawn McCadden of RemodelMyBusiness.com, an industry trainer and former remodeler, points out that if you want the flooring of an addition to seamlessly meet that of the existing home, the height of the subfloor will depend on whether you are using ¾-inch strip oak or ¼-inch-thick engineered flooring. Getting the subfloor right will be easier if you pour the foundation at the right level. "If you don't define the kitchen flooring before pouring the foundation,

Specs can include instructions that tell trades how you want things done. BOWA, a remodeling company in McLean, Va., has a 63-page Trade Standards document that includes sections for carpenters, roofers, insulators, plumbers, electricians, HVAC installers—even the companies that install fire sprinklers and central vacs.



how do you know what height to pour the concrete?" McCadden asks.

On the other hand, there's usually no need to define construction details where the workers understand company expectations. If your carpenters know how to correctly install sheathing, you probably don't have to call out details such as nailing patterns.

It's a good idea to orally review your specs for construction details with new subcontractors. For example Anschel's roofing specs require metal drip edge along all roof edges, something most roofers in his area don't automatically install because it's not required by local codes. If the roofing sub sends a crew that hasn't worked on one of his jobs before, the job supervisor reviews this requirement with them.

You can present this information in whatever way suits your business. Some remodelers put details on the blueprints, including model numbers of plumbing and electrical fixtures. Others put most of this detail—from concrete and framing lumber to cabinets, hardware, wall paint, and roof shingles—on separate documents.

"Although I put a lot of information on my drawings, I create separate, very detailed schedules for lighting and plumbing fixtures," says Doug Walter, a Denver architect who works exclusively with remodelers.



CREATING BOILERPLATE

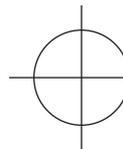
If the clients already have a design, then meeting with them and the subs on site and writing an estimate with detailed specifications should take between 10 and 16 hours for a major kitchen remodel and maybe 4 hours for a 30-square-foot

bath, McCadden says. He adds that the time is an investment rather than a cost. "Ask yourself: Will it take longer to do this work right or to be constantly answering questions and correcting mistakes?"

Done right, this work also gets easier with each job. Dixon is author of *Finding Hidden Profits: A Guide for Custom Builders*, a subject he lectures on at industry events nationwide. He hears lots of concern about

IT'S A GOOD IDEA TO KEEP A COPY OF YOUR SPECS IN ONE PLACE AT THE JOBSITE. TRADES CAN TAKE A PHOTO OF DETAILS THAT PERTAIN TO THEM AND CLIENTS CAN REVIEW THEM AS WELL.

how long writing a thorough spec will take. "Contractors at my seminars all agree on the importance of good specs but complain they lack the time to write them," Dixon says. However, he points out that while the first set of specs can take some time to



prepare, you'll be able to reuse a lot of the information and, ultimately, you'll create boilerplate language you can use again and again. "Start with the spec for a small kitchen or bath," Anschel advises. "You may end up with four or five pages that become a template you can customize for other jobs." As a bonus, you'll have started with the most complex parts of the house, so the other rooms will generally be easier.

Boilerplate specs tend to be a work in progress, with most remodelers refining and adding to the documents over time. "If the electrician always has to ask you how high above the kitchen island you want the three pendants," Anschel says, "start including that dimension." He adds that one client put a level on the garage slab and asked why it wasn't level. His crews know that a garage slab needs a 1/8-inch slope, but Anschel added it to his garage specs, in case another client asks in the future.

There may be as many different types of boilerplate template as there are remodelers, but they tend to fall into two broad categories. Dixon's approach is one: He uses the spec documents from a previous, similar job as a template on each new job. He then handwrites any changes on a printed copy and types those into the new document.

The other approach is represented by McCadden. During the years when he ran a full-time remodeling business, McCadden created stored templates for common jobs. He also created a library of boilerplate passages for specific tasks and saved them so they could be inserted in the templates as needed. 

Charlie Wardell is a freelance writer and former remodeler in Tisbury, Mass.

MAIN BATH: SPECIFICATIONS

Permits

1. Contractor (and subsequent sub-contractors hired by Contractor) will obtain all needed permits based off specifications listed below.

General Site Prep

2. Supply dumpster(s) and dispose of all construction waste generated from this project
3. Sort for recyclable materials
4. Designate cutting areas, material drop off areas, disposal location, and walkways to minimize overall site impact
5. Protect existing hardwood floors not scheduled for re-finishing
6. Identify and protect construction walkways in the home
7. Install and maintain dust protection as needed around areas to be worked on
8. Follow RRP protocol for lead paint management

Demolition

9. Remove and dispose of floor coverings
10. Remove and dispose of wall coverings
11. Examine dropped ceiling to determine clearance for ventilation fan and remove if possible
12. Remove and dispose of sink and tub
13. Remove stool and store for re-use
14. Remove partition wall alcove around existing tub

Masonry

15. NA

Construction

16. Frame new partition walls for alcove around tub per plans
17. Patch and repair subfloor as necessary

Roofing

18. N/A

Electrical / Lighting Fixtures

19. Feed and install one (1) new fixture with switch to control located in hallway
20. Re-device existing switch to control fan/light/heater combo unit
21. Feed and install one (1) new fixture on existing switch in tub/shower
22. Re-device existing GFCI receptacle at new location per plans
23. Furnish one (1) vanity light
24. Progress lighting: LYNZIE P2805-15
25. Finish - Chrome
26. Furnish and install one (1) shower/tub light (wet location rated)
27. The Great Outdoors: #9802-144
28. Finish - Stainless steel

Plumbing / Plumbing Fixtures

29. Remove existing tub/shower valve and cap feed
30. Cap feed to existing sink and faucet
31. Cap feed to existing stool
32. Furnish and install new tub at new location
33. Furnish and install new pressure balance shower valve at new location
34. Furnish and install new shower head on adjustable slide mount
35. Furnish and install new undermount sink at new location
36. Re-set existing stool at existing location
37. Tub:
38. Bain Ultra- Meridian
39. Color: White
40. Shower Valve:
41. Delta - 51406-SS with T17T459-SS-H2O
42. Color: Brilliance Stainless
43. Sink:
44. Kohler - #K2210-0
45. Color: White
46. Lav Faucet:
47. Kohler - #K-R37026-4-D-BN

HVAC

48. Furnish and install one (1) Panasonic 110 CFM Fan/light/heater combo unit
49. Vent to exterior with insulated duct
50. Remove one (1) radiator for reuse
51. Sandblast and prime one (1) radiator

Insulation

52. N/A

Sheetrock and Paint

53. Furnish and install ½" gyp board on walls of bathroom
54. Tape/Sand/Finish
55. Furnish and install 5/8" gyp board on ceiling if dropped portion is removed
56. Tape/Sand/Finish
57. Prime and paint all drywall surfaces with ultra low VOC latex paint
58. Paint one (1) radiator
59. Paint new millwork with ultra low VOC latex paint

Windows / Doors / Trim

60. Re-use existing bathroom door
61. Install new 1x abbreviated casing on interior of bathroom door
62. Species: Poplar - paint grade
63. Install tile baseboard/wainscoting around perimeter of bathroom
64. Re-use existing window trim

Flooring

65. TILE (see tile)

Tile

66. Furnish and install ½" Dens-Shield in Tub Alcove
67. Install waterproofing at joints and all penetrations
68. Furnish and install mud base over 15lb felt on floor
69. Furnish and install tub surround tile per plans
70. Furnish and install wall tile per plans
71. Furnish and install floor tile per plans
72. Furnish and install two (2) shampoo shelves in tub/shower area per plans
73. Tile:
74. 4x12 MILAZZO #95 ICE
75. 4x12 FLA CRETE - GREIGE
76. 4x12 MILAZZO #95 GREY
77. 3x6 SPANISH MOSS 74202
78. CUT TO 2.5" ALWQ84 / 1632 ORANGE
79. 12x24 Q-STONE- GREY

Cabinets / Countertops

80. Furnish and install new vanity per plans
81. Species: ALDER
82. Stain: Clear
83. Furnish and install new recessed medicine cabinet per plans
84. Species: ALDER
85. Stain: Clear
86. Furnish and install granite countertop at vanity that extends out over stool
87. Color: TBD

Hardware

88. Furnish and install one (1) recessed TP Holder
89. Renovators Supply - R-Line
90. Finish: Stainless Steel
91. Furnish and install one (1) towel ring
92. Kohler #K-13435-G
93. Finish: Brushed Chrome
94. Furnish and install one (1) t
95. Kohler #K-13433-G
96. Finish: Brushed Chrome
97. Furnish and install one (1) c
98. Signature Hardware #91170
99. Finish: Brushed Nickel

Appliances

100. N/A

Specialties

101. Remove and reinstall existing grab bars at existing locations
102. Furnish and install additional grab bar in the shower

Post-Construction

103. Clean bathroom and areas impacted by construction.

Option(s) Not Included in Contract Price

104. Add semi-transparent privacy film to lower sash of double hung window \$135.00

Effective specs encompass every important feature and product on the job. Here, Otogawa-Anschel Design+Build provides enough detail to avoid misunderstandings with the homeowner, reduce change orders, and clarify a number of procedures for employees and trades.