

# Fine Homebuilding Product Report

## REPORTS

### Extendable plumb stick

Get any two carpenters talking shop after the power cords have been rolled up at the end of the day, and you'll invariably be treated to a tool critique. Another beer later, one of them is likely to be sketching a tool on a 2x6 scrap that "somebody ought to come out with."

Paul Semler, a 34-year old Tucson carpenter, is one tradesman who didn't stop puzzling about the need for a tool that would plumb walls of any height once that Friday afternoon discussion broke up. It took him two years of weekends to design, refine and patent his invention, but what he came up with is a level that can be extended from 4 ft. in height to over 10 ft. 6 in. No way, right? Most tools that attempt to do several things or expand in size either don't do any single task very well or lose accuracy as they get bigger. This one seems to be an exception. Designed primarily as a plumb-and-line tool, it weighs about 10 lb. and will fit easily behind the seat in a pickup.

What Semler has done is to take a good-quality, 4-ft. aluminum carpenter's level and

add webbed aluminum extrusions to each side. These extensions have a channel on one side that rides up and down on the I-beam flange of the level. They are outfitted at opposite ends with a reinforced horizontal bar that is welded on. When the extensions are raised, these bars act as the bottom or top points of reference that form a straight line with the extension on the opposite side.

The cleverest part of the tool is the mechanisms that keep the extensions at whatever height you want. These are not positive stops, which would limit the number of height settings for the tool, but a set of aluminum fingers held in tension by stainless-steel springs. These dogs press against the edge of the extension channel, forcing it against the I-beam flange of the level.

Each extension is secured by two dogs—one on each side of the level—that are connected by a single quick-release lever located in one of the web openings. One dog points up and the other one down for each extension. The friction that this sets up between the aluminum rails removes any play or slop that would cause the level extensions to give an inconsistent reading. Semler has gone to a glass-beaded matt finish where the dogs rest on the surface of the extension channel. This means that you should almost be able to hang off the extension at any height without any risk of telescoping it.

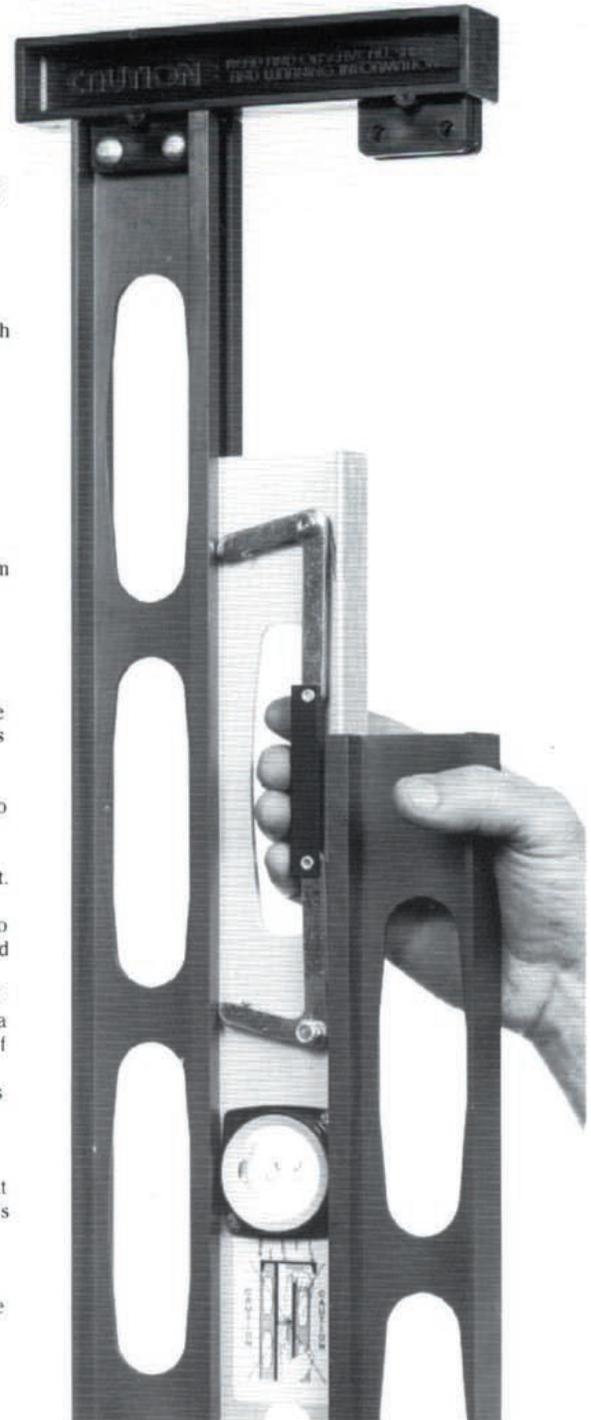
**Mother necessity**—Semler learned the trade as a tract piece-worker in his native Southern California. But when he moved to the Tucson area, he began to do more custom framing, including a lot of shed roofs. That meant plumbing and lining walls of every height—not just the 8-ft. walls typical of the tracts. For every height wall, he would have to find a straight stud, cut it off at the right height, fit it with plywood shims to offset the possibility of a bowed stud, and then nail his level to it.

Semler's "better way" is well thought out. One extension is offset at the bottom  $\frac{1}{8}$  in. to allow for the bowed-stud problem. The horizontal member welded to the top of the other extension is offset by the same amount. But the flip-side extension doesn't have this offset so that you've got 4 ft. of solid metal to use as a straightedge when you're setting and shimming out door jambs. That's not like using a good 78-in. level for setting standard jambs, but then Semler's level will adjust to a small attic door cut with the pitch of the roof or a 9-ft. door in a dramatic entryway.

The trademarked name for this new tool is the Plumb-It Level, and Semler finished securing the full patents on it just this year. Semler makes them himself. He contracted with a local window company for the die that makes the extrusions; he gets the dog springs from another source. Semler currently cuts the webbing voids with a router, but soon will be punching them out with a press and then rounding them over with a router. Once he has completed a batch of extensions (typically 20 to 50 of them) he gets them anodized blue. The extrusions are first rate,

and the mechanics are simple and solid. But at a cost of \$129 (plus shipping), it has got to fill a need in your work routine, not just satisfy your craving for collecting interesting tools.

Until recently this level was made of magnesium, but it is now anodized aluminum. The vials look as though they are adjustable, but are actually fixed. But they are replaceable—a nice feature. For more information, or to place an order, write Semler at 3045 North Dodge Blvd., Tucson, Ariz. 85716. —Paul Spring



## USER COMMENTS

I use the **Plumb-it** level constantly in light commercial wood framing and I have found that its speed and accuracy and durability is unbeatable. A conscientious builder shouldn't go through life without a Plumb-it level. The Plumb-it level allows me to perform my work with 'no doubt' and no wasted moves."

*Dennis S. Cahalin  
Las Vegas, Nevada*

"The only level I would use on walls over 6' tall. It is an excellent product; a real time saver.

*Dave Couture  
Framing Superintendent, Del Webb  
Tucson, Arizona*

"I have had great results from my level and have only the best to say about it"... "Now a Building inspector... I use it to check the work of others."

*Chris Thyrring  
Halcyon, California*

"Our firm has purchased at least 8 (Plumb-it) levels over the last 2 years — wouldn't be caught dead without them."

*Gean Saucerman  
Foreman, Tucson Carpentry  
Tucson, Arizona*

"My help use it everyday and everybody likes it. Its just great when you have different plate heights. If it holds up we'll be buying another one in the future. PS. Great level!"

*William C. Law  
Atlantic Highlands, NJ*

"Thank you for a very good useful tool!"

*Edward Feuerstack  
Bergenfield, New Jersey*

"I think your invention is terrific! It's saved me many hours of 'straight-edge searching' and given me the satisfaction of knowing the job is right every time. I use it on timber, landscaping walls, fence posts... long waste lines (plumbing) and it's great for Deck construction!" "It's a pleasure to use and always saves time, I've recommended it to others."

*David Connor  
Truro, Massachusetts*

I use it "setting windows — sliding doors — exterior door frames, etc. — excellent for plumbing gable end trusses."

*Austing Marks  
West Willington, Connecticut*

"I would not recommend it to others because if all framers had one -the Builders I sub work from won't be so impressed with me and my Professionalism."

*Bordelon Construction Co.  
New Orleans, Louisiana*

"Since my business covers such a wide range of things, from building houses to fixing toilets, I don't always have a need for my Plumb-it. When I do need it, I LOVE IT! And would certainly replace it and recommend it."

*Robert C. Howard  
Cliff Island, Maine*

"I recommend it (the Plumb-it extendable level) all the time, I could not do without it. In fact I am not sure how I did as well in the trades before I had it.

My Plumb-it stick is the greatest tool I have ever had the privilege to own and use. My entire crew loves it in every way.... I hardly ever do tract homes, so eight foot walls or partitions are some-thing we never see. Henceforth, being able to extend where ever it is needed our stick does it all."

*Tom D. Marier, General Contractor  
Memphis, Tennessee*

"The level is great. On Long Island they use a 2' level to plumb and line a house. (But they also use 16 oz. hammers for framing, no worm drive saws, cloth aprons and even a few fold up rulers still.) Thanks for inventing something so functional, modern and useful. Thank you.

Jim Lohead, President (with callouses)  
*Armstrong Bothers Builders, Inc.  
Oakdale, New York*

"The Plumb-it level has far exceeded my expectations, its light weight, extendable, and very accurate."

*Kevin Craig  
Black Walnut Building & Design  
Tilghman Island, Maryland*