



June 27, 2007

## C.H. Hanson Pivot Square – Review

C.H. Hanson, a company known for their high-quality layout and marking tools, has begun rolling out a new line of innovative tools they call the Signature Series. Kicking off this collection is their new Pivot Square, an all-in-one roof and stair layout tool.

At first glance, the Pivot Square looks like a traditional speed square with a few level vials built-in. But upon closer inspection there are plenty of differences. First, it's larger, with the sides measuring 8" as opposed to 7". Secondly, and more significantly, there is a portion of the square that pivots out and can be locked in position, much like a bevel gauge. But, unlike a \$4.99 bevel gauge, the pivot square tells you the degree as well as the roof pitch of the captured angle. Also, the hypotenuse has a ruler on it, as opposed to a degree finder.



In the hands, the tool feels extremely sturdy (it's much beefier than the standard speed square), and the locking mechanism, a little metal roller, locks securely, but is easy to open when the time comes. It's one of those tools that just by holding it in the hands, you know it's quality.

The Pivot Square is not something you can just pick up and start using. Roof framing is not a simple thing and neither is this tool (initially, at least). But thankfully, the Pivot Square comes with an invaluable little book, *The Expert Guide to Roof Construction and Framing* by John Carroll.

We read through the book and tip our hats to Mr. Carroll.

There's no question that this guy knows what he's talking about. The book starts with a clear description of the Pivot Square and a quick overview of its uses. Then it gives a nice background to the more theoretical aspects of roof construction and trigonometry. Then finally, he gets to the nitty-gritty and walks through a number of roof scenarios using the new tool. The chapters are as follows:

- Laying Out a Gable Roof
- Laying Out a Gable Roof with a Pitch Greater than 12-in-12
- Laying Out a Roof with a Blind Valley
- Laying Out a Roof with a True Valley
- Laying Out a Hip Roof

The book also describes how the Pivot Square can assist with stair layout. With the help of a framing square (as instructed), we had no problem following the directions and making two perfect stair stringers. As detailed in the book, the Pivot Square method prevents the problem of cumulative error that we've seen happen over and over again.

The Guide to Roof Construction and Framing is well-written, easy to understand and filled with detailed example, and it wasn't that long before we had a grasp on the basics of the Pivot Square. Even though this is no speed square, there *are* similarities, and we can say with confidence that the book provided with the Pivot Square completely blows away the books that come with both the Swanson and the Johnson Speed squares.



In addition to roofs and stairs, the Pivot Square can also be used as a saw guide, much like a speed square, except now, cuts can be done at an angle.

The tool comes with the aforementioned book, a flat carpenter's pencil and a durable, padded carrying case. The case fits the tool, the book (don't lose the book!) and the pencil all comfortably, and has a belt hook on the back of it for when you're up there hopping between rafters.



There's no doubt that there is a learning curve involved with the Pivot Square, which can be a bit frustrating for someone not familiar with the concepts of roof framing. But think about it this way: you're not driving screws with the pivot square, you're laying out a roof system. It's not supposed to be something you pick up in a few minutes or even a few days. With the booklet and a bit of patience, it won't be too long before you start getting it. In fact, if you're new to roof framing, the Pivot Square is perfect seeing as you have no old habits to break.

In summary, this is an amazing little tool. If you're a carpenter, a serious DIYer, and especially if you've got a roof project coming up, you should check it out. Like we said, it does take some getting used to and you're probably going to

have to change the way you do things, but because it's so compact and does so much, we think it won't be long before you'll adapt to the tool.

A lot of thought went into the Pivot Square and it shows. But if you want one, you've got to pay for that thought. The Pivot Square isn't cheap. It retails for just under \$85. It's a good chunk of change, but if you're in a position to need it, and you're willing to take the time to learn how to use it, the tool will be invaluable.

We're looking forward to the rest of C.H. Hanson's signature series.

At [C.H. Hanson Direct](#)

