

# ARE SOLAR MANDATES WORTH THE TRADEOFFS? HOLLY HALL AT HPD ARCHITECTURE + INTERIORS WEIGHS IN

By Troy Camplin - May 15, 2018



California has become the first state to mandate the installation of rooftop solar panels on most single-family homes, as well as on three-or-fewer story multi-family dwellings, starting in 2020. Since California is known to be a vanguard in social and economic changes in the United States, we thought it might be a good idea to get the reaction of an architect to this change in legislation in California.

Holly Hall, architect and interior designer at *hpd architecture + interiors* in Dallas, TX, believes this to be a move in the right direction, saying, "It will create many benefits for the environment, for home owners, and for the solar industry."

At the same time, there are inevitably going to be costs. While [CNBC reports](#) that "The solar mandate is expected to add on average about \$9,500 to the cost of new houses," Hall believes the cost to be somewhere between \$10,000 and \$20,000, depending on the installation. At the same time, Hall argues that building homes with solar in mind does

make it cheaper than installing solar later, and the electricity savings can balance things off.

“Just like any material or system that is selected on the basis of future cost savings you have to weigh the return on investment,” Hall said. “Solar panels deliver immediate savings to your electric bill. By installing the panels during the new construction of a home, the cost is much less and the installation is cleaner.”

This law will of course also force changes on the architecture industry, from design to manufacturing.

“More attention to roof shape and orientation of the house will be needed to make the most of the South facing roof surfaces,” Hall explained. “We will see a wave of innovation in building design by architects to hide the panels, or to purposefully integrate them into the form of the building. On the manufacturers’ side, we’ll see efforts to create more interesting shapes, application methods, and improved efficiency.”

Of course, legislation that works in California won’t work the same in other states, where weather can have a strong influence on design.

“Texas is notorious for strong thunderstorms and large hail that can wreak havoc on traditional solar panels. New solar panel technology will need to be developed like the [Fabral Flex 02N Roofing System](#) that would allow the solar panels to be applied directly to the metal roof,” Hall said.

The primary negative to this legislation would seem to be the fact that it will necessarily drive up housing prices in a state that already has an affordable housing crisis—a crisis that is one of the reasons people are moving from California to places like Texas. At this time, California seems willing to make the tradeoff.