

# BRADEN ROOFING NEWS™ VI

## HOMEOWNER'S GUIDE TO

### DEC-K-ING AND DECTEK CUSTOM

### FLATROOFS

Welcome to BRN VI. As always, we appreciate your interest in Braden Roofing, THE ONE WITH THE GREAT REPUTATION™. It is our sincere hope that these news articles continue to educate the general public about roofing products and installation. Our long-term goal is to make the roofing trade into a more respected institution for generations to come.

The featured products of this BRN are custom walkout deck flatroofs by Dec-k-ing and DecTec. These custom products are among my own personal favorite roofing products for the simple reason that they are just plain a lot of fun! It is not often in the roofing trade that we get to describe our products as fun, but that label certainly applies to Dec-k-ing and DecTec products. Custom flatroofs are products which not only serve a utilitarian function—they keep the area underneath dry—but they also are just a lot of fun to have. Custom flatroofs are great for outdoor fun, patio parties, or just enjoying the quiet serenity of open, fresh air. They go great with any kind of walkout area such as a sundeck, garage deck, roof deck, or even a rooftop penthouse.

For more information, you are always welcome to check with the manufacturer(s). Dec-k-ing may be contacted at (800) 804-6288. DecTec can be reached at (800) 268-1078, or [www.dec-tec.com](http://www.dec-tec.com).

At Braden Roofing, we don't really take preferences between these two products. We think they are both excellent products. We can proudly install either.

Before we continue, let's take a hot look at a few photos of some custom flatroofs which Braden Roofing has installed. In PICTURE #1, we see a walkout deck with the custom flatroof recently installed. Custom flatroofs are great for lakeside or poolside decks, as we see in PICTURE #2. Wouldn't this be a great place to throw a party and meet people? PICTURES #3 and #4 show two more views of a custom flatroof installed by Braden Roofing. Custom flatroofs are grand any way you look at them.



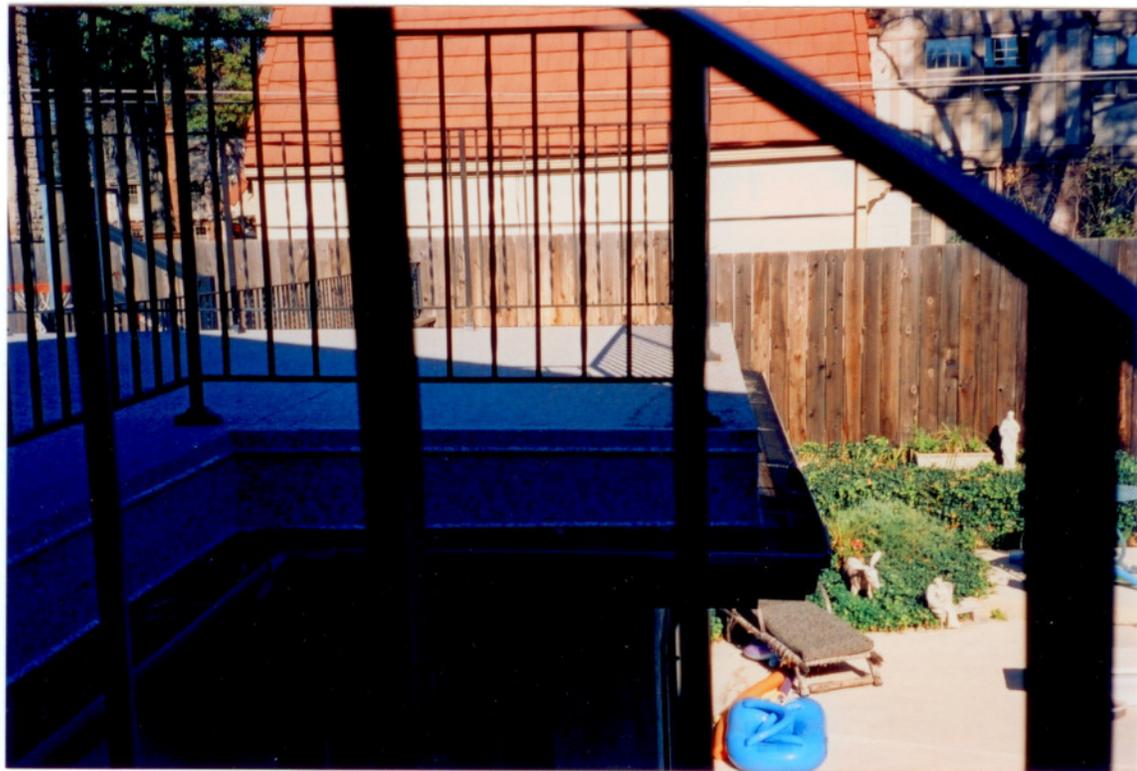
**Picture #1 A custom flatroof on a walkout deck.**



**Picture #2 This is a great place to have a party and meet people.**



**Picture #3 A closer view of a custom flatroof.**



**Picture #4 Custom flatroofs look great from any angle.**

Before custom flatroofs existed, if you wanted to have a nice outdoor walkout deck area with a dry area underneath (hot tub, anyone?), you actually needed TWO products to get the job done. To make the area underneath dry, you needed a conventional flatroofing material. To have a walkout area, you would need to additionally construct a wooden deck atop the flatroof.

Not only is this costly, but it is also mechanically problematic. Furthermore, most traditional decks have been composed of CCA lumber, which can be highly carcinogenic. Tests have proven that CCA lumber continues to seep arsenic for many years, even if you coat or stain the wood. Do you really want to be walking on a CCA deck with bare feet? How about petting your dog or cat that has been sleeping on the deck?

Constructing a deck on top of a (traditional) flatroof can be very problematic mechanically. How do you put the deck in place without damaging the flatroof? Frequently, the wooden deck installed atop the flatroof damages the flatroof. Now the area underneath is no longer watertight. Maintenance of a traditional flatroof underneath a wooden deck is practically impossible without damaging the deck. If you want to fix the flatroof, you will have to tear apart the deck! Installing a custom flatroof solves this problem because it is only one system yet it does the job of two.

Installing two systems (the flatroof and then the deck atop) is costly. While installing a custom flatroof is not what I would call cheap, it is still significantly more cost effective than installing a flatroof and then a deck. The cost of a custom flatroof will depend upon circumstances such as size, shape, location, rail connections, and how much preparatory work is needed. I will discuss preparatory work in more detail at the end of this article.

Both Dec-k-ing and DecTec are vinyl based products which have been formulated to be resistant to UV sunlight. They are thermoplastics similar to TPO (see Braden Roofing News V). Both carry 10 year warranties. Both come in 6 foot rolls and have seams which are heat-welded. As you can see in the photos which you have already seen, the seams are practically invisible from most angles. From certain angles and under certain circumstances, the seams are visible. You can see this in PICTURE #5. However, this picture demonstrates that the seams are still fairly inconspicuous even under the worst of lighting circumstances.

As with any quality roofing system, much of the quality of a custom flatroof is subject to the quality of the installation. At Braden Roofing, we believe in doing the best and most thorough construction possible. In roofing as in life, the greatest difficulties can be found in the transitions. Custom flashings are available from both of the manufacturers we recommend. When properly installed, custom flashings will make transitions strong, tight, and beautiful, as we see in PICTURE #6. This picture shows a custom flatroof



**Picture #5 Dec-tec detail. In this picture, you can see the seams because the sun is casting hard shadows. This picture shows that even under the worst of lighting circumstances, a properly constructed seam is visually inconspicuous.**



**Picture #6 Custom flashings are available. When properly installed by skilled craftspersons such as those at Braden Roofing, splices and transitions will be strong, tight and beautiful.**

splicing cleanly into a wall and corner post with the aid of a manufacturer-provided flashing. In PICTURE #7, we see that the skilled craftsmen at Braden Roofing have successfully tied the custom flatroofing material into and below a sliding door threshold.

Both Dec-k-ing and DecTec require minimal maintenance. Both might require an occasional cleaning, but that is about it. Still, it would be wise not to abuse these wonderful systems. You might want to be careful with the barbecue grills. A heat-resistant mat between the roof and the grill would be a good idea. Chair and table footings will be fine, but you might not want to unnecessarily drag large heavy objects over your beautiful custom flatroof. When properly installed (as by the expert installers at Braden Roofing), a custom flatroof should provide years of carefree luxurious comfort.

The next section of this edition of BRN deals with some technical issues. If technical issues bore you, you may want to skip to the conclusion.

#### PREPARATORY WORK

Proper installation depends very much on proper preparatory work. There are three very critical issues of custom flatroof prep work. They are:

1. Proper drainage.
2. Proper roof substrate.
3. Proper substrate preparation.

Manufacturers recommend that even flatroofs have some minimal pitch to allow for proper drainage. We typically like to see about a 2% pitch, which is about  $\frac{1}{4}$  of an inch per foot. Many pre-existing sun decks do not have this pitch because they were built with slatted boards. The builders of the deck had no intention of giving the roof a pitch or making the area underneath watertight. They figured the excess water would just pass between the decking slats. In order to create a slight pitch, some modification of the structure may be needed.

The easiest way would be to shorten the length of the deck supports on the edge furthest from the house, or wherever you want water to drain. For a skilled carpenter, this is a fairly easy fix. Sometimes this just isn't possible, and we instead have to build up one side of the deck.

When we must raise one side of the deck, I very much prefer to actually run new rafters. Certainly this is more difficult for the carpenters (and therefore more expensive for the homeowner) than to simply shim up one side, but the result is vastly superior. At Braden



**Picture #7 Sliding door thresholds are not a problem for the skilled installers of Braden Roofing.**

Roofing, we believe that shimming on a structural level is a pretty crummy construction technique. It is much better to spend a little more and have a beautiful, long-term solution.

Sometimes, by raising one side of a deck, we can create other unintended problems. What if the lift of the deck runs higher than the bottom edge of a sliding door? Before we begin construction on a custom deck project, homeowners, carpenters, and roof installers should all carefully think through the possibilities. It is far better to anticipate and solve a problem before it becomes a problem, than to have difficulties while a project is under construction and have to "wing it". At Braden Roofing, we work very hard to cross-coordinate projects with homeowners and carpenters. We have excellent references from previous customers, and can offer excellent references for quality carpenters. We can work with anybody if they are professional and organized.

In PICTURE #8, we see a clever solution to an interesting problem. On this roof, we had to lift up on side to create more pitch. The carpenters on the project ran a new rafter system on top of the old rafters. This meant that the edge showed an unfinished wood surface. We used the same flatroofing material to cover this unfinished surface and tied it together with custom flashings. The result is an elegant finish which can accommodate a gutter either directly below the roof edge or further down at the transition.

Installing a proper substrate means a minimum of  $\frac{3}{4}$ " thickness plywood. Some carpenters I have worked with prefer to double the  $\frac{3}{4}$ " plywood to double guarantee that the decking substrate will be immobile. I can't disagree. The stronger the better.

Once the substrate is properly installed, it is then of vital importance to properly "prep out" the substrate. Because custom flatroofing is a fairly thin (but durable) product, it transposes imperfections in the substrate right through to the surface. By using an approved floor-leveling compound, we can smooth out lumps, knot holes, and seams. The installed custom flatroof will then have a lovely smooth surface.

Yes, proper preparatory work takes a little bit more time, but at Braden Roofing, we feel that taking a little bit of extra time is well worth the result of having a better roof.

## CONCLUSION

As part of this conclusion, I would like to show you two more photos. PICTURES #9 and #10 are before and after photos of a walkout deck where we installed a custom flatroof. You may judge for yourself how much of a difference in beauty alone our flatroof installation made. When you think of that room add-on you've always wanted, or when you see that crummy old plankboard deck, or when you dream of converting



**Picture #8 The roof level was raised to create proper drainage. We covered the unfinished edge with the same custom flatroofing and tied it into custom flashings.**



**Picture #9 A walkout deck before we installed custom flatroofing.**



**Picture #10 The same walkout deck after we installed custom flatroofing.**

that old office building walkout into something truly spectacular, think of Braden Roofing and custom flatroof products!

Again, we thank you for your interest in the Braden Roofing News articles. For all your roofing needs, remember Braden Roofing—THE ONE WITH THE GREAT REPUTATION.

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