

## How to Maintain and Restore a Deck Showing Uneven Wear

Remember the ‘Early Bird Gets the Worm’ phrase? Well, that applies to proactive deck maintenance, as well. Deck maintenance before visible wear and tear leads to a much easier and enjoyable experience.

No matter what kind of wood you’ve chosen for your deck, all decking requires a maintenance coat of finish to maintain beauty and the highest level of protection. In most cases, a simple water bead test will show if it’s time for maintenance. And, in many cases, a simple wash and maintenance coat are all that needs to be done.

However, the wear on a deck can be uneven, and differentiation in wear becomes clearly visible when timely maintenance is not done.

### Issues that Impact the Maintenance Cycle

It’s important to inspect the surface carefully from time to time and look for even the smallest signs that maintenance is needed. For example, a deck may have a high traffic area that leads from the back door to a pool or a much-used lawn area. Alternatively, perhaps a couple of areas see excessive wetting from sprinklers. Other design issues might cause trouble. Downspouts or a clogged evestrough (gutter) can cause a waterfall to constantly pour water onto an area of the deck during times of precipitation. Other areas may get more wear from higher than normal exposure to rain, snow, sun or foot traffic. Remember, excessive wetting (moisture) is much more problematic than UV exposure. Wetting causes the wood to swell and then shrink while drying. From this natural expansion and retraction, little cracks will form as the wood cycles through

these extreme conditions. This causes the wood to discolor and the coatings to wear prematurely. Designing the landscape and roof drainage to avoid excessive wetting can help reduce these extremes and extend maintenance cycles.

In the instances above, putting a maintenance coat over the entire surface may not work to address specific, more acute wear issues.

### Deck Case Study

The following deck maintenance example shows how to both restore and maintain areas on the same deck that show uneven wear.

**Deck Situation:** A southwest facing, 1,200 square foot cedar deck in London, Ontario, Canada, was finished with one coat of Sansin Dec in Espresso and one coat of SDF Topcoat Espresso in April 2016.

Sansin’s Dec product is a penetrating finish that works well for wetter wood situations. Normally, Dec is a 2-coat system. However, in this instance, the owner wanted a fuller finish and therefore, selected Dec as the first coat and SDF Topcoat as the finish coat. This deck ranges from sitting on ground level to a maximum clearance of 12” from

ground level in an area (London, Ontario) that is considered an extreme climate for decks. It lies at the latitude of 42.5 degrees near to the Great Lakes, which brings large seasonal temperature and climate contrasts with lake effect moisture and snow. **(Photo #1)**

### Maintenance Inspection:

After two years, in April 2018, the deck looked to be in good shape – and perhaps at most would need a simple cleaning. But, after more thorough, careful examination, a small area along the garden – where the sprinkler wets about three feet in on a daily basis – small checks (cracks) were



Photo #1



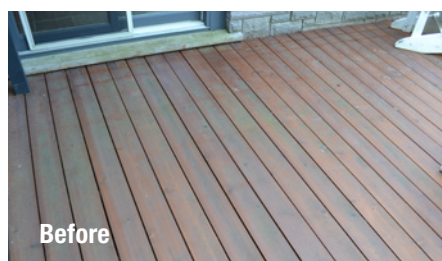
Photo #2



noticed. It was clear by May of 2018 that a simple maintenance coat would be necessary to protect these newly opened surfaces.

As it turned out, to the owner's regret, the maintenance of the deck was put off until September of 2018 **(Photo #2)**. That meant the deck was into a third season of sprinkler wear and tear.

While 95% of the surface still looked great, the area that was wetted daily had started to discolor around the tiny checks. Also, some areas near the end grain were showing signs of moisture intrusion and



Once the cleaner has been applied for the recommended period of time, rinse off the deck with a hose. Use a lot of water, but then let the deck dry thoroughly. **(See Photos #4 and #5)**

### Step Two – Corrective Action on Worn Spots

Before putting a maintenance coat over the entire surface, it was evident that one cedar plank was showing more discoloration around little cracks from excessive moisture (swelling and contraction) or insufficient coating. **(Photo #6)** the decision was made to redo this board that showed signs of wear down the middle of the wood. The grayer wood



and slight yellowing show that insufficient coating was applied. This can be due to improper preparation or application, or sometimes a board can be of poorer quality and wear faster. In this instance, the owner can't spot treat, but will instead sand the board down to bare wood with 60-80 grit paper and refinish that board with Dec and SDF Topcoat.

Once the entire deck is top-coated, it will



blend and you will not be able to notice a difference in color or clarity. **(Photo #7)** On other areas, a spot treatment was necessary. One area was damaged by a sprinkler that drenched certain boards, leading to discoloration and calcium deposits from water pooling. In this heavily wetted area by the sprinkler it was clearly visible which end grain surfaces were not protected. The end grain of wood absorbs moisture more than twenty times faster than perpendicular to the grain. It is important to protect end grain properly.

After carefully sanding the specific spots with 60-80 grit sandpaper **(See Photos #8 and #9)**, Dec Espresso stain was applied directly to those bare areas with a China bristle brush **(Photo #10)**.

Using a strong color formula would better match the color as penetration is less when scuff sanding compared to random orbital sanding. The product was



swelling and contraction. **(See Photo #3)** Had the deck been maintained in Spring of 2018, then a maintenance coat would have been sufficient. Waiting just four months longer caused two areas to need more corrective treatment, turning a half-day job into a two-day job.

The plan now was to both 1) correct the high wear areas that were left too long, 2) and maintain the other areas with the normal maintenance coat using SDF Topcoat.

### Step One – Clean Deck and Prep Surfaces

For maintenance coat preparation, the owner used Sansin Multi-Wash. You can apply Multi-Wash with a scrub brush.



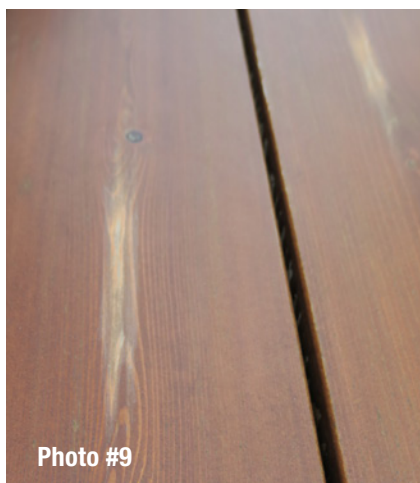


Photo #9

left to stand wet and soak into the bare wood because applying to the point of refusal would match the color with the previous applied products.

After letting it sit, excess product was brushed away, leaving about 4-5 wet mil of Dec remaining **(Photo #11)**. They were careful to wipe product away from the intact coating around the bare spot.



Photo #10



Photo #11

The newly stained area was then scuff sanded (220 grit) to prepare for the SDF Topcoat. This coat was applied in a similar way to the first, but allowed to blend in to the surrounding, intact coating area.

### Step Three –

Now that the corrective staining was complete, a maintenance application of SDF Topcoat was applied to the entire deck. SDF Topcoat was applied with a 6" Corona brush. **(Photo #12)**

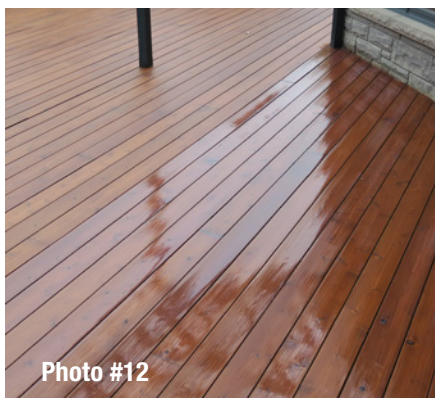


Photo #12

### Results and Looking Ahead

The completed cedar deck is now ready for two or more years of protection. The owner will now be more careful about ensuring the sprinkler system does not hit parts of the deck leading to faster wear – and keeping the gutters clean.

The takeaway here is to apply a maintenance coat before more serious corrective action is needed. As the example showed above, waiting one season too long can make all the difference.



Fully Restored Deck

### ABOUT SANSIN DEC

Sansin Dec provides durable protection for high-wear horizontal wood surfaces like decks, docks and balconies. Provides excellent UV and weather protection and will not crack, peel or blister.



### ABOUT SANSIN SDF TOPCOAT

Sansin SDF Topcoat is a durable top-coat system that can be applied to any SDF base coat system – for substrates including siding, logs, and timbers. The high solids will build a satin like finish that is highly durable to moisture and weathering.

