

Low Maintenance Materials

There are 2 main categories of low maintenance decking. **PVC** (polyvinyl chloride) and **Composite**.

Composites are blends of materials. They can be either HDPE (high density polyethylene) or LDPE (low density polyethylene), and different manufacturers' recipes include a variety of cellulose type fillers (wood, rice hulls, carpet fiber, granulated rock). At least one brand uses polystyrene as the base material, and there have been attempts with fiberglass, and polystyrene too.

Low maintenance composite products have been around since the late 80's when Roger Wittenberg combined sawdust and shredded plastic bags creating a material he called Rivenite. In 1992, Mobil Chemical Co. acquired Wittenberg's technology and re-branded it as Timbrex, and in 1994 the name was changed to Trex, which became and has remained the industry leader in composite decking.

The most popular benefit of these products is there is no annual staining or painting required to maintain the look. A cedar deck requires work (annual maintenance) to protect it from the elements and to keep it looking original. Most of the composite and PVC (near maintenance-free) materials will pay for themselves in less than 5 years when taking into account the routine maintenance costs associated with wood decks.

Most manufacturers have previously offered warranties from 10 years to lifetime, and the majority are now 25 - 50 year (pro-rated). Any of the low maintenance products will outlast wood. The cedar and pressure treated (PT) lumber you buy today is not like what it was for previous generations. We are now experiencing cedar board replacement in as little as 5-7 years due to there not being any old growth forests left to harvest.

There are a lot of good reasons for choosing either PVC or Composite decking. The compelling reason is that low maintenance decks don't require annual staining or painting. Other benefits include no splinters, and they are typically less slippery than wood decks, especially when wet. Low maintenance decks have proven to be in the top 3 home improvement values for the dollar according to most real estate companies. PVC is typically nicer to work with versus composite. PVC decking is lighter, screws easier, (no pre-drilling), and cuts easier. PVC is the world's third-most widely produced synthetic plastic polymer. Cortex concealed fastening is easier to install into PVC decking, and it contains no organic material. Traction is typically much better on PVC than wood. Scratch resistance can vary from very high on VEKA, EnDeck, and Clubhouse, to somewhat lower on Wolf and Azek. PVC can be curved and shaped (bent) much easier than composite.

Advantages of low maintenance decking

1. No staining or painting required
2. No splinters
3. Does not rot
4. Does not twist, crack or warp
5. Less slippery than wood in most cases
6. Often backed by a manufacturer's warranty
7. Less expensive long term
8. Most have hidden fastening systems, and all PVC may be installed with Hid-FAST.
9. Easy to clean
10. Environmentally friendly – often made from recycled materials
11. Consistent quality – can use every board in the lift
12. Many brands may be heated and shaped to create visually and aesthetically pleasing shapes and designs.

Disadvantages of low maintenance decking

1. More expensive short term
2. Expansion and contraction with temperature changes, whereas wood only shrinks over time.
3. Some brands are less scratch resistant than others.
4. Fading may occur (age of material and brand specific).
5. More difficult to transport due to board on board slipperiness & floppy where unsupported.
6. Building code approvals not yet established on all brands.
7. Dark colours (especially composites) tend to get hot (similar to grayed wood)