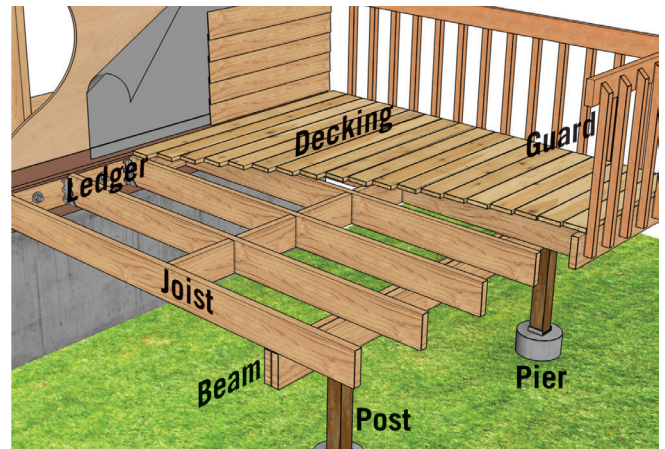


# Decks

For many, a deck is an extension of the home. It brings indoor life to the great outdoors. With a little care, a deck can last for many years. Neglected, it can become an eyesore or worse, unsafe! This spotlight on decks provides a few tips to help keep your deck safe and in good condition.

## Permit

Is a permit required to build a deck? Most municipalities require a permit to build a deck. The permit process helps to ensure that the deck is safe and sound through verification of the design and inspections of the deck at various phases of construction. Unfortunately, many decks get built without a permit. The result is that many decks are poorly constructed and some are unsafe.



## Deck Materials

**Pressure Treated Wood:** The most common deck building material is pressure treated wood. Properly maintained, a pressure treated wood deck can last 20 years. Pressure treated wood comes in construction grade and premium grade. Construction grade pressure treated wood tends to warp and split as it dries and shrinks. This is fine for the deck structure but the decking surface calls for a higher quality material. Premium pressure treated deck boards are cut from better stock and are treated and dried to a higher standard. The deck boards are more dimensionally stable and look better both immediately after construction and in the long term.

**Cedar:** Cedar is a premium deck building material with a rich look and feel. It is more expensive than pressure treated wood but it has many desirable properties. It is naturally more dimensionally stable than pressure treated wood so it does not shrink and split. A well maintained cedar deck can last 20 years.

**Synthetic:** Synthetic decking is the most expensive decking material but it requires little to no maintenance beyond cleaning and should last many years. There are many different types and styles. For example, Weyerheuser makes a product called ChoiceDeck® that is made of wood fibers encapsulated in polyethylene. Synthetic decking usually is very heavy and normally requires a stronger structure to support it.

## Wood Sealer

The secret to a deck that looks good over the years is wood sealer. Unsealed wood will absorb water and expand and then dry out and shrink. Over time the wood splits and deteriorates. Here's a test to see if your deck needs sealer. Pour a cup of water onto the wood, if the water beads up and runs off, the deck is in good shape. Otherwise it needs sealer.

## Guard Rails

Guard rails keep you safe on your deck. The point is to keep people including young children from falling from the deck. Guards are required for decks higher than 30 inches from the ground. In some municipalities, a guard is required for a deck that is 24 inches from the ground. The specifics of a quality guard rail are spelled out in local building codes but this list will get you started:

- The guard rail should be 36 inches high. A deck over 6 feet high requires a 42 inch guard.
- There should be no openings larger than 4 inches so nobody can fall through.
- It should be strong enough to hold a person that falls heavily into the rail or balusters.
- It should not be easily climbable - no footholds.

## Deck Collapse

“Except for hurricanes and tornadoes, more injuries may be connected to deck failures than all other wood building components and loading cases combined.” - Wood Materials and Engineering Laboratory at Washington State University. Many decks fail because they are old, worn and rotted. Others fail because they were not built properly in the first place. The most critical connection is the deck-to-house connection. The illustration below shows a good deck-to-house connection including:

- A ledger that is attached securely to the house structure.
- Flashing to keep water from leaking behind the ledger. Water is directed over the ledger.
- Joist hangers attach joists to the ledger.

## Check Your Deck

Look for these signs of trouble:

- Wood rot: If you see wood rot it could be worse than you think. Rotted connections such as the ledger board to house connection could lead to deck collapse.
- Good connections: Check points of connection of major components such as the deck to house, guard rail to deck, beam to post, post to pier, etc. You should see plenty of metal brackets and bolts not nails.

If in doubt, have an expert look at your deck. For example, it is very difficult to inspect the deck-to-house connection because it is not easily accessible. Of course, it helps if you know what you are looking for.

There are over 40 million decks in North America with over 1 million being built or re-built each year. With care, a deck can last many years and provide a safe place to enjoy the great outdoors.

