How to Build a DIY Air Purifier

Air purifiers can range in terms of both cost and efficiency. Key factors to consider when purchasing an Air Purifier are the clean air delivery rate (CADR) and size of the room the purifier will be used in. The CADR rating is dependent on the type of filter being used and the fan power of the unit. High quality air purifiers have high CADR rates. Air purifier units with good CADR ratings typically cost hundreds of dollars. Prices increase for units that are quieter and more compact.

Low-cost DIY solutions include the Corsi-Rosenthal Box Air Purifier and the Basic Design Air Purifier. The figures below, provided by the EPA, outline the materials and methods for constructing DIY air purifiers. The DIY air purifiers can easily be moved to rooms that are occupied by individuals who are sensitive to smoke. It is important to note that DIY air purifiers are ineffective with dirty filters, thus the filters should be replaced regularly. Multiple DIY air purifiers may be needed depending on the space needed to be cleaned.

Video Links:

Basic Design DIY Air Purifier

The Corsi-Rosenthal Box DIY Air Filter

Figure 1. Corsi Rosenthal Box Design

Figure 2. Basic Design

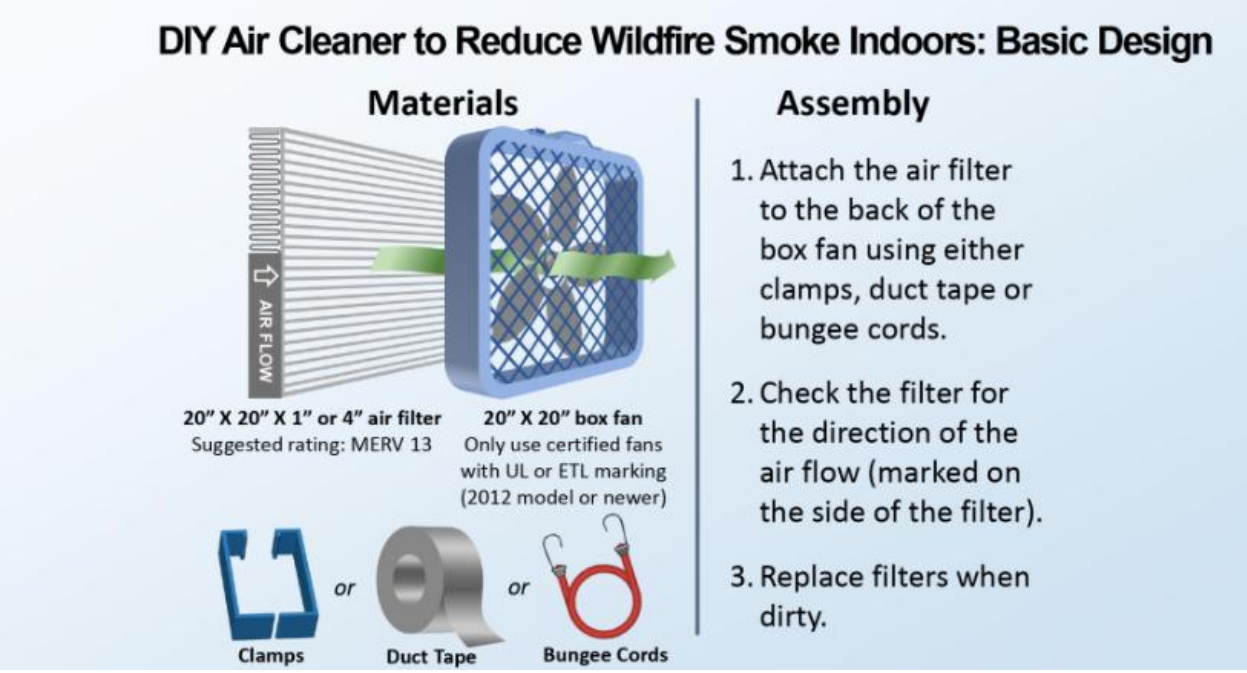

Figure 3. EPA Infographic for Basic Design DIY Air Cleaner

Figure 4. EPA Infographic for Corsi Rosenthal Box DIY Air Cleaner