



## WHY SEAL ENTRYWAYS?

Air leaks are the most common consumers of energy dollars. It is stated that at least 30% of a home's heating energy is lost through windows. One of the quickest energy and money saving tasks you can do is to caulk, seal, and weather strip all the cracks and large openings to the outside. Air sealing windows and doors can save up to 20% on energy bills and prevent air, water, bugs, and dust from entering your home.

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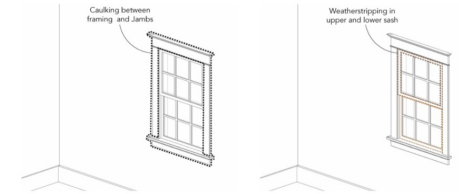
### BENEFITS OF AIR SEALING

- Facilitates maintaining even and comfortable temperatures inside of your home.
- Reduces draft effect and lessens the burden on HVAC system to maintain indoor temperature.
- Improves air quality of the homes and helps in humidity control.
- Wherever the home is exposed to higher road traffic, air sealing reduces noise levels too!

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### DIFFERENCE BETWEEN CAULKING AND WEATHERSTRIPPING

The primary use for caulk is to help seal any gaps, cracks, and joints that are less than an inch along the fixed part of the windows. Weatherstripping is the process of sealing the gaps in the moving parts of the windows.



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### CHOOSING THE RIGHT MATERIAL FOR APPLICATION

Choose a product for each specific location that can withstand friction, weather, temperature changes, wear and tear associated with the location.

#### Weatherstripping –

- Thin spring metal: Most durable, comes in rolls and is nailed in place.
- Rolled vinyl gasket: Durable, comes in rolls and can be obtained with metal backing
- Adhesive-backed vinyl V-strip: Works well for sealing doors and hinged windows and between two window sashes.
- Adhesive-backed foam strip: Short-term solutions, can withstand only one season. Use closed-cell foam and not open-cell which wears out quickly.
- Foam rubber with wood backing: Not durable but easy to install.

#### Caulking –

- Butyl rubber, acrylic latex (for indoor applications) and silicone (preferred for exterior application also)
- Acrylic latex caulk with silicones, silicone caulk, 1-part urethane, or other durable caulks – available as cartridges
- Backing material, such as foam backer rod – available as rolls or strips.

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### REFERENCES

#### Guidebooks

- Guide to air sealing by Department of Energy
- Airsealing – Energy technical bulletin 8 by Habitat for Humanity
- Weatherize your home- Caulking and Weatherstripping by National Renewable Energy Laboratory (NREL)
- Home energy projects by Southface Energy Institute

#### Webpages

- Air sealing your home by Department of Energy
- Air Sealing Window and Door Rough Openings by Building America Solution Center, PNNL.
- Weatherstripping by Department of Energy
- Caulking by Department of Energy