

APA



Simple Air Sealing

with OSB and Plywood Sheathing

YOU DRILL IT, YOU FILL IT.

Understanding the importance of air sealing is everyone's responsibility on the job site. Many builders have instituted “you drill it, you fill it” policies for subcontractors to be responsible for sealing their own gaps and holes. Often the framer is the proper subcontractor for air barriers that need to be installed prior to mechanical rough-ins.

According to the U.S. Department of Energy, as much as **30 percent of a home's energy usage can come from air leakage**. Take a proactive approach to sealing penetrations with minimal cost: 3/8 category or thicker plywood and OSB are code-recognized air barrier materials that deliver solid performance for tighter, more energy-efficient homes.

KEY PRINCIPLES

1. Air will take the path of least resistance. Seal the biggest penetrations and gaps first, then move on to the smaller ones.
2. There is no “one size fits all” solution. The size of the hole or gap can help guide which product to use. Use caulk or gaskets for smaller holes. Use tapes and spray foam for larger holes and gaps.
3. Air barriers, whether flexible or rigid, should maintain contact with the framing and be sealed at the edges to prevent air leakage.

SEALANT MATERIALS



FOAM



CAULK



MASTIC

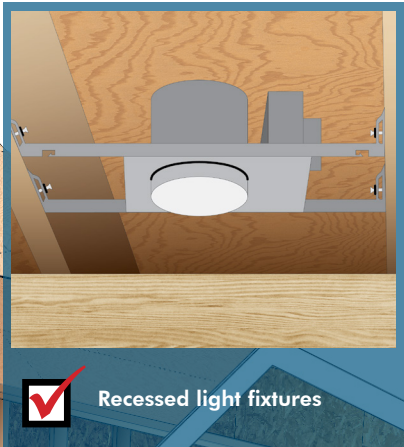
Note: Use sealants that are labeled ICC/ANSI approved. Do not use standard construction adhesive.



AIR SEALING CHECKLIST

Ten Common Sources Of Air Infiltration That Should Be Checked And Sealed Thoroughly During Construction

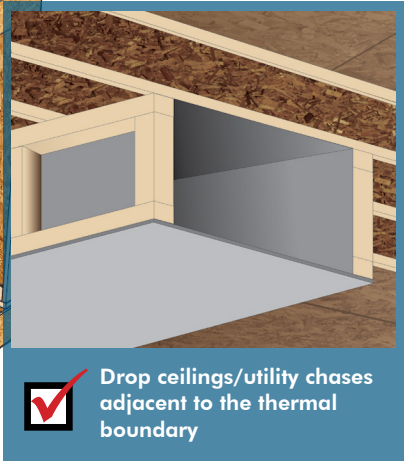
✓ Knee walls and vaulted ceiling party walls



✓ Recessed light fixtures

✓ All joints, seams, and penetrations that allow the free flow of air through them

✓ Openings between window and door assemblies and their respective jambs



✓ Drop ceilings/utility chases adjacent to the thermal boundary

✓ Rim joist junctions where the sill plate meets the slab or meets the Rim Board

✓ Utility and mechanical penetrations, between conditioned and unconditioned spaces and between floors



✓ Behind tubs and showers on exterior walls
Note: Area highlighted in blue.

Note: Some elements eliminated for clarity.

For more information on energy-efficient building solutions,
visit www.apawood.org/energy-efficiency.

Simple Air Sealing

We have field representatives in many major U.S. cities and in Canada who can help answer questions involving APA trademarked products. For additional assistance in specifying engineered wood products, contact us:

APA HEADQUARTERS

7011 So. 19th St. ■ Tacoma, Washington 98466
(253) 565-6600 ■ Fax: (253) 565-7265

PRODUCT SUPPORT HELP DESK

(253) 620-7400 ■ help@apawood.org

DISCLAIMER

The information contained herein is based on APA – The Engineered Wood Association’s continuing programs of laboratory testing, product research, and comprehensive field experience. Neither APA, nor its members make any warranty, expressed or implied, or assume any legal liability or responsibility for the use, application of, and/or reference to opinions, findings, conclusions, or recommendations included in this publication. Consult your local jurisdiction or design professional to assure compliance with code, construction, and performance requirements. Because APA has no control over quality of workmanship or the conditions under which engineered wood products are used, it cannot accept responsibility for product performance or designs as actually constructed.

Form No. T210/Issued July 2018



REPRESENTING THE ENGINEERED WOOD INDUSTRY