

# TECH TIPS

## ATTICS: OBSTRUCTIONS/OBSTACLES



1. Boxes (electrical, smoke, CO, etc.): Cut and/or split insulation around wiring and boxes.



2. Ceiling fan boxes: Cut and/or split insulation around ceiling fan boxes, wiring and any support bracing.



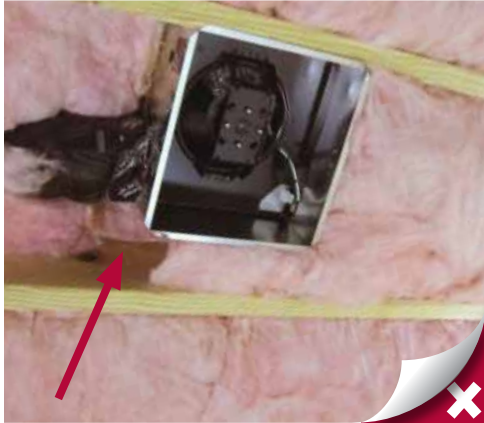
3. Recessed Lights (IC and ICAT rated only): Cut and/or split insulation around wiring and recessed lights and fit snugly to boxes.  
**Notice: Recommend using ICAT rated.**



4. Wires (electrical, cable, security, low voltage, etc.): Cut and/or split insulation around wiring and fit snugly to boxes and other obstructions.

# TECH TIPS

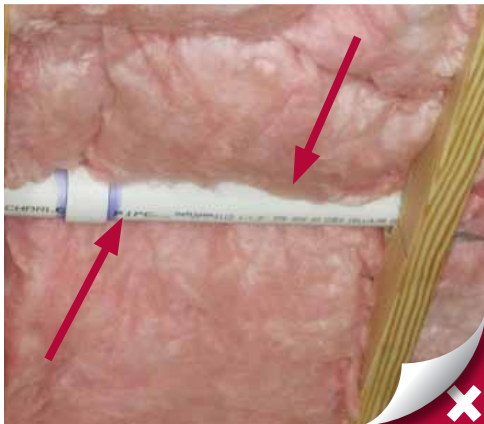
## ATTICS: OBSTRUCTIONS/OBSTACLES



- 5.** Exhaust/ventilation fans: Cut and/or split insulation around exhaust fan boxes, ductwork, wiring and any support bracing and fit snugly to boxes.



- 6.** Ducts/connectors: Cut and/or split insulation around HVAC Boots and insulated ductwork and any support bracing.



- 7.** Pipes (water supply, plumbing vents, etc.): Cut and/or split insulation around pipes.

NOTICE: The clearance between insulation and fossil-fuel appliances, chimneys, recessed lights and other hot surfaces must meet the requirements of the National Fire Protection Association (NFPA) and International Code Council (ICC) building codes, and the appliance manufacturers' recommendations - whichever is most restrictive.

In general, when installing insulation in contact with or near hot surfaces:

1. Check the manufacturer's instructions for equipment and appliances to determine any insulation requirements or restrictions.
2. Check the applicable building code for insulation clearance requirements. These are typically contained in the fire, building and mechanical codes. If there are any questions - consult your local building department for the applicable requirements.
3. Mineral fiber insulation (fiber glass, rock and slag wool) are noncombustible but may have flammable facings which cannot be used in hot applications. These insulations are also available with noncombustible facings and facings which have flame spread and smoke developed indices appropriate for most code requirements.
4. When it is permissible to insulate in hot applications, note that most fiber glass products used in building insulation melt at approximately 800 degrees F and rock wool products used to insulate buildings melt at approximately 1200 degrees F. Both fiber glass and rock wool materials are available which have higher melting temperatures.



# TECH TIPS | WALLS: LIMITED ACCESS AND SPECIAL SITUATIONS



1. Stairs/landings: Install insulation to fill the cavity between conditioned and unconditioned space without gaps, voids, misalignments or compression.



2. Tubs/showers: For walls that will not have an interior finish and are separating conditioned and unconditioned spaces, wall cavities are insulated and an interior rigid air barrier is installed.



3. Fireplaces: For walls that will not have the same interior finish and are separating conditioned and unconditioned spaces, wall cavities are insulated and an interior rigid air barrier is installed.

Note: Limited Access and Special Situations are areas on exterior walls that may be easier to insulate before covering up. It is advisable to insulate these cavities first/before other wall cavities are insulated.

# TECH TIPS

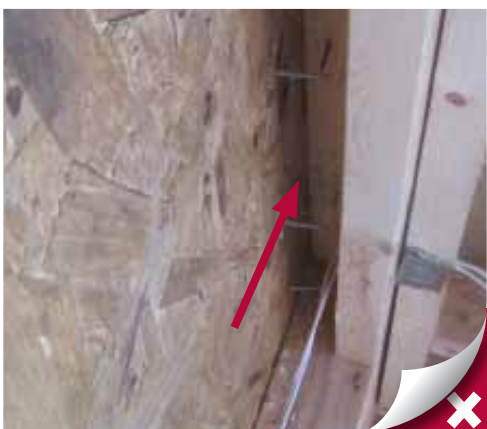
## WALLS: NARROW AND ODD CAVITIES



1. Narrow cavities: Install insulation to fill the cavity between conditioned and unconditioned space without gaps, voids, misalignments or compression.



2. Odd cavity: Install insulation to fill the cavity between conditioned and unconditioned space without gaps, voids, misalignments or compression.



3. Corners: Install insulation to fill the cavity between conditioned and unconditioned space without gaps, voids, misalignments or compression.



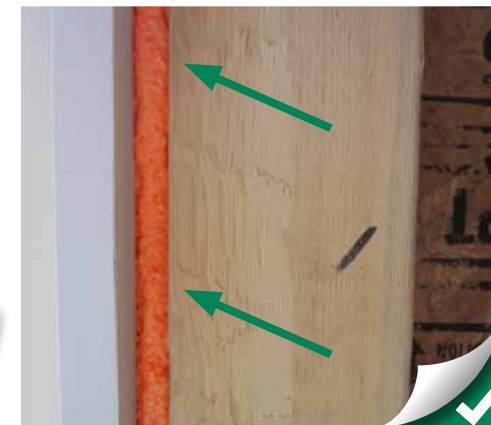
4. Ladder T (interior/exterior wall intersection): Install insulation to fill the cavity between conditioned and unconditioned space without gaps, voids, misalignments or compression.

# TECH TIPS

## WALLS: NARROW AND ODD CAVITIES



- 5.** Vapor retarder: Where a vapor retarder is required, cover the warm-in-winter side of the narrow space with vapor retarder facing.

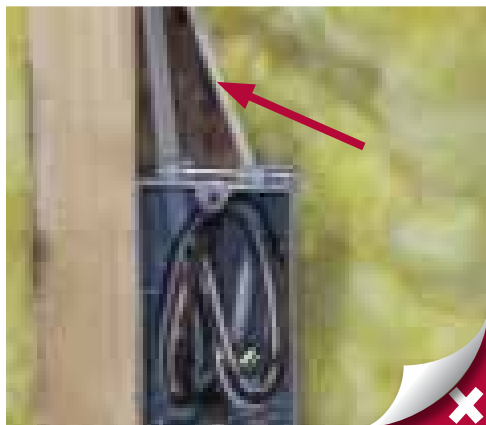


- 6.** Windows/doors: Air seal around windows and doors using backer rod, caulk or low expansion foam. Do not use fibrous insulation or air-permeable foam.



# TECH TIPS

## WALLS: OBSTRUCTIONS/OBSTACLES



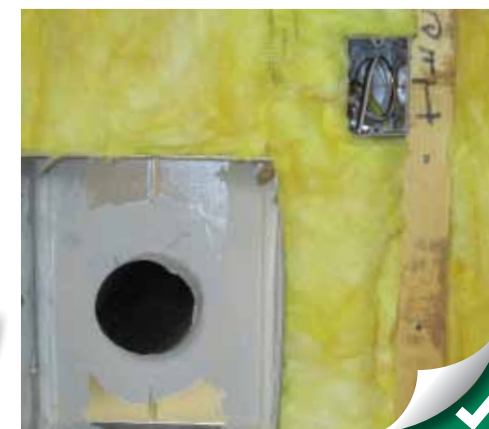
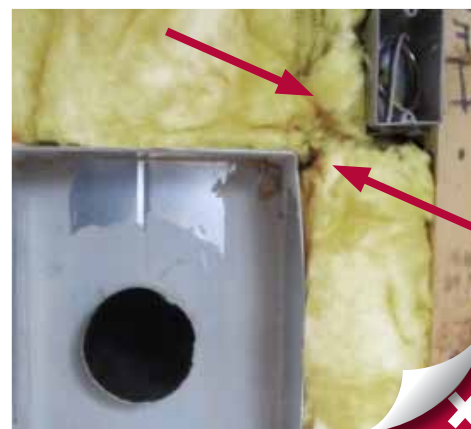
1. Boxes (electrical, smoke, CO, etc.): Cut and/or split insulation around wiring and boxes and place a piece of insulation behind the box.



2. Electrical panel: Cut and/or split insulation around electrical panel wiring.



3. Wires (electrical, cable, security, low voltage, etc.): Cut and/or split insulation around wiring.



4. Dryer/Exhaust: Cut and/or split insulation around exhaust fan boxes, ductwork, wiring and any support bracing.

# TECH TIPS

## WALLS: OBSTRUCTIONS/OBSTACLES



- 5.** Pipes (water supply, plumbing vents, gas lines, etc.): Cut and/or split insulation around pipes.

# TECH TIPS

## WALLS: RIM/BAND JOISTS



1. House-to-garage band joist: Ensure there is a complete air barrier between conditioned and unconditioned spaces.



2. House-to-outside band joist: Ensure there is insulation between conditioned and unconditioned spaces.



3. Conditioned crawl/basement-to-outside rim joist: Ensure there is a complete air barrier and insulation between conditioned and unconditioned spaces.



# TECH TIPS

## WALLS: STANDARD CAVITIES (FACED)



1. Gaps: Install insulation to fill the cavity completely between conditioned and unconditioned space without gaps.



2. Voids: Install insulation to fill the cavity between conditioned and unconditioned space without voids.



3. Misalignment: Install insulation to fill the cavity between conditioned and unconditioned space without misalignments.



4. Compression: Install insulation to fill the cavity between conditioned and unconditioned space without compression. Split or slit batts around the wires.

# TECH TIPS

## WALLS: STANDARD CAVITIES (UN-FACED)



- 1.** Gaps: Install insulation to fill the cavity between conditioned and unconditioned space without gaps.



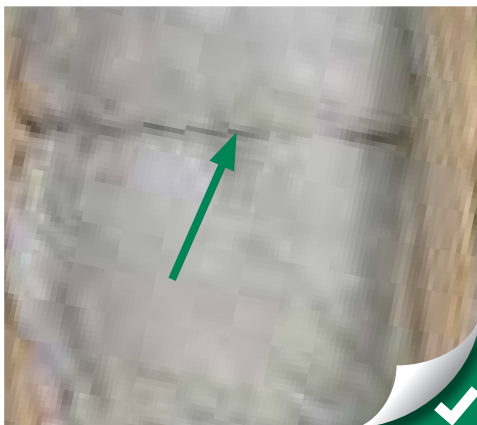
- 2.** Voids: Install insulation to fill the cavity between conditioned and unconditioned space without voids.



- 3.** Misalignment: Install insulation to fill the cavity between conditioned and unconditioned space without misalignments.



- 4.** Compression: Install insulation to fill the cavity between conditioned and unconditioned space without compression.



- 1.** Gaps: Install insulation to fill the cavity between conditioned and unconditioned space without gaps.



- 2.** Voids: Install insulation to fill the cavity between conditioned and unconditioned space without voids.



- 3.** Misalignment: Install insulation to fill the cavity between conditioned and unconditioned space without misalignments.



- 4.** Compression: Install insulation to fill the cavity between conditioned and unconditioned space without compression.



# TECH TIPS | FLOORS: ABOVE UNCONDITIONED CRAWLSPACE/BASEMENT



5. If using kraft-faced batts: Install kraft facing against the warm-in-winter side of cavity.

# TECH TIPS

## FLOORS: OBSTRUCTIONS/OBSTACLES



1. Ducts/connectors: Cut and/or split insulation around HVAC Boots and insulated ductwork and any support bracing.



2. Wires (electrical, cable, security, low voltage, etc.): Cut and/or split insulation around wiring.



3. Pipes (Water supply, plumbing vents, gas lines, etc.): Cut and/or split insulation around pipes.

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