1 - ATTIC CRITICAL DETAIL : AIR SEALING A CHASE

EXISTING HOME TECH TIPS

(SPRAY FOAM)

DESIRED OUTCOME(S)

- 1. Air does not enter or exit the house through the chase.
- 2. Eliminate bending, sagging or movement.
- 3. Adhesion of sealants to all surfaces to be air sealed in order to stop the passage of air.

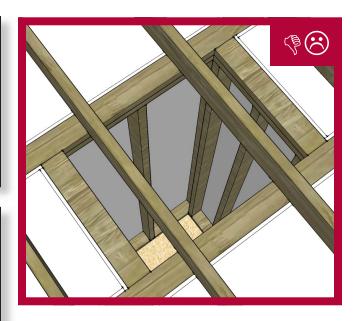
EFFECTS ON THE HOUSE

Openings to the attic allow heat, cold and moisture movement to/from the attic and house and may result in decreased durability.

EFFECTS ON THE OCCUPANTS

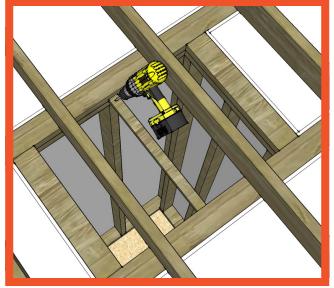
Intrusion of unhealthy air from unconditioned areas, reduced comfort, possible back drafts containing poisonous fumes and higher utility bills.

MATERIALS	
TOOLS	



SAFETY

• Before entering attic or cutting, put on all personal protection equipment. *This is* to reduce the amount of dust particles you breathe, protect your eyes and hands.



JOB PREP

- Measure size and cut <u>filler material</u> larger than opening in all directions. If <u>filler material</u> bends, sags, or moves when in place, a support material must be used.
- If needed, cut <u>support material</u>. <u>Support material</u> must not sag or bend when fastened.
- Fasten any <u>support material</u> in place.

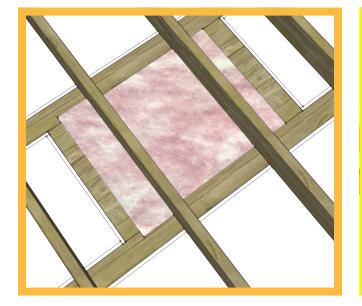
DO NOT USE NAILS

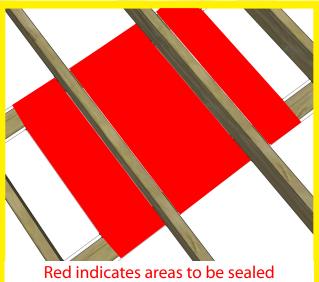
1 - ATTIC CRITICAL DETAIL : AIR SEALING A CHASE

EXISTING HOME TECH TIPS

(SPRAY FOAM)









FILLER MATERIAL

• Install <u>filler material.</u>

AIR SEALING

• Spray foam. Assure 100% of the edge and all penetrations are air sealed. The finished foam seal must be rigid and completely covering the <u>filler material</u>.

FINAL PRODUCT

2 - ATTIC CRITICAL DETAIL: DROPPED CEILING



(SPRAY FOAM)

DESIRED OUTCOME(S)

- 1. Air does not enter or exit the house through the dropped ceiling.
- 2. Eliminate bending, sagging or movement.
- 3. Adhesion of sealants to all surfaces to be air sealed in order to stop the passage of air.

EFFECTS ON THE HOUSE

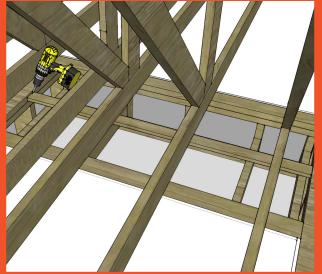
Openings to the attic allow heat, cold and moisture movement to/from the attic and house and may result in decreased durability.

EFFECTS ON THE OCCUPANTS

Intrusion of unhealthy air from unconditioned areas, reduced comfort, possible back drafts containing poisonous fumes and higher utility bills.

MATERIALS	
Filler Material	
Support Material	
Fasteners	
Sealants	
	TOOLS





SAFETY

• Before entering attic or cutting, put on all personal protection equipment. *This is to reduce the amount of dust particles you breathe, protect your eyes and hands.*

JOB PREP

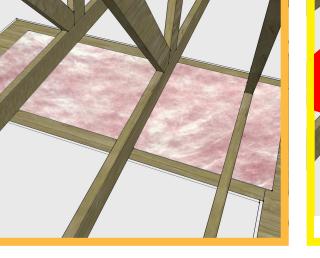
- Measure size and cut <u>filler material</u> larger than opening in all directions. If <u>filler material</u> bends, sags, or moves when in place, a support material must be used.
- If needed, cut <u>support material.</u> <u>Sup-</u> <u>port material</u> must not sag or bend when fastened.
- Fasten any <u>support material</u> in place.

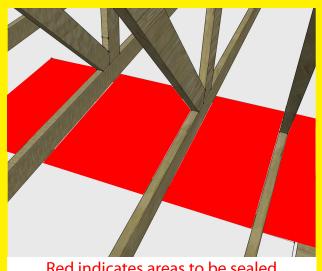
DO NOT USE NAILS

2 - ATTIC CRITICAL DETAIL: DROPPED CEILING

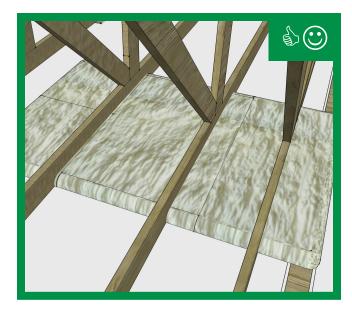
EXISTING HOME TECH TIPS

(SPRAY FOAM)





Red indicates areas to be sealed



Advanced

FILLER MATERIAL

Install filler material. ٠

AIR SEALING

Spray foam. Assure 100% of the edge and • all penetrations are air sealed. The finished foam seal must be rigid and completely covering the *filler material*.

FINAL PRODUCT

3 - ATTIC CRITICAL DETAIL: SOFFIT, FURRED-DOWN OR BULKHEAD

EXISTING HOME TECH TIPS

(SPRAY FOAM)

DESIRED OUTCOME(S)

- 1. Air does not enter or exit the house through the soffit, furred-down or bulkhead.
- 2. Eliminate bending, sagging or movement.
- 3. Adhesion of sealants to all surfaces to be air sealed in order to stop the passage of air.

EFFECTS ON THE HOUSE

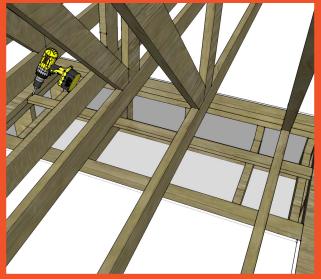
Openings to the attic allow heat, cold and moisture movement to/from the attic and house and may result in decreased durability.

EFFECTS ON THE OCCUPANTS

Intrusion of unhealthy air from unconditioned areas, reduced comfort, possible back drafts containing poisonous fumes and higher utility bills.

MATERIALS		
Filler Material		
Support Material		
Fasteners		
Sealants		
	TOOLS	





SAFETY

• Before entering attic or cutting, put on all personal protection equipment. *This is to reduce the amount of dust particles you breathe, protect your eyes and hands.*

JOB PREP

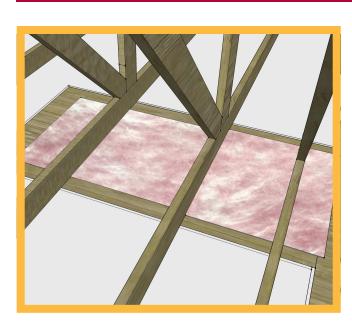
- Measure size and cut <u>filler material</u> larger than opening in all directions. If <u>filler material</u> bends, sags, or moves when in place, a support material must be used.
- If needed, cut <u>support material</u>. <u>Sup-</u> <u>port material</u> must not sag or bend when fastened.
- Fasten any <u>support material</u> in place.

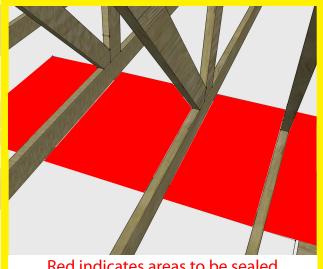
DO NOT USE NAILS

3 - ATTIC CRITICAL DETAIL: SOFFIT, FURRED-DOWN OR BULKHEAD

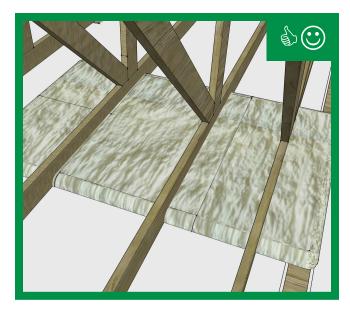
EXISTING HOME TECH TIPS

(SPRAY FOAM)





Red indicates areas to be sealed



Advanceo

FILLER MATERIAL

Install filler material. .

AIR SEALING

Spray foam. Assure 100% of the edge and • all penetrations are air sealed. The finished foam seal must be rigid and completely covering the *filler material*.

4 - ATTIC CRITICAL DETAIL: OPEN STAIRWELL



(SPRAY FOAM))

DESIRED OUTCOME(S)

- 1. Air does not enter or exit the house through the open stairwell.
- 2. Eliminate bending, sagging or movement.
- 3. Adhesion of sealants to all surfaces to be air sealed in order to stop the passage of air.

EFFECTS ON THE HOUSE

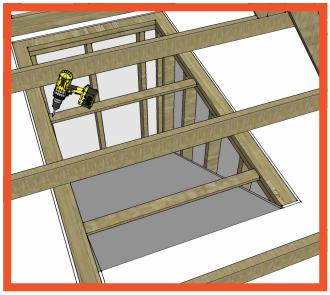
Openings to the attic allow heat, cold and moisture movement to/from the attic and house and may result in decreased durability.

EFFECTS ON THE OCCUPANTS

Intrusion of unhealthy air from unconditioned areas, reduced comfort, possible back drafts containing poisonous fumes and higher utility bills.

MATERIALS	
Filler Material	
Support Material	
Fasteners	
Sealants	
	TOOLS





SAFETY

• Before entering attic or cutting, put on all personal protection equipment. *This is* to reduce the amount of dust particles you breathe, protect your eyes and hands.

JOB PREP

- Measure size and cut <u>filler material</u> larger than opening in all directions. If <u>filler material</u> bends, sags, or moves when in place, a support material must be used.
- If needed, cut <u>support material</u>. <u>Sup-</u> <u>port material</u> must not sag or bend when fastened.
- Fasten any <u>support material</u> in place.

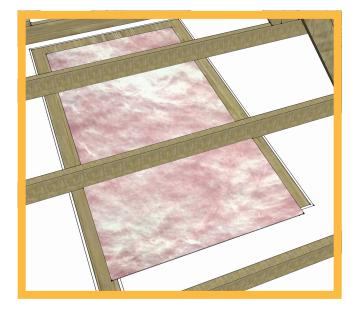
DO NOT USE NAILS

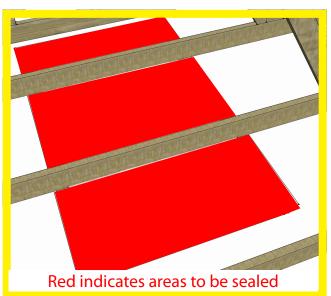
4 - ATTIC CRITICAL DETAIL: OPEN STAIRWELL

EXISTING HOME TECH TIPS

(SPRAY FOAM)









FILLER MATERIAL

• Install <u>filler material.</u>

AIR SEALING

• Spray foam. Assure 100% of the edge and all penetrations are air sealed. The finished foam seal must be rigid and completely covering the <u>filler material.</u>

FINAL PRODUCT

5 - ATTIC CRITICAL DETAIL: OPEN WALL CAVITY

EXISTING HOME TECH TIPS

(SPRAY FOAM)

DESIRED OUTCOME(S)

- 1. Air does not enter or exit the house through the open wall cavity.
- 2. Eliminate bending, sagging or movement.
- 3. Adhesion of sealants to all surfaces to be air sealed in order to stop the passage of air.

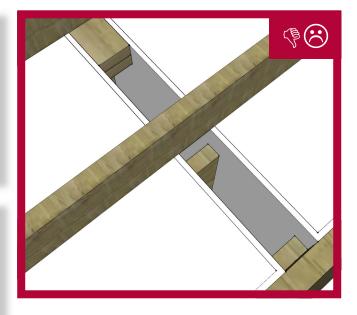
EFFECTS ON THE HOUSE

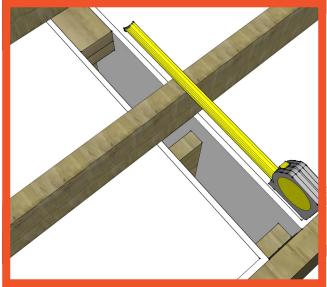
Openings to the attic allow heat, cold and moisture movement to/from the attic and house and may result in decreased durability.

EFFECTS ON THE OCCUPANTS

Intrusion of unhealthy air from unconditioned areas, reduced comfort, possible back drafts containing poisonous fumes and higher utility bills.

MATERIALS	
Filler Material	
Support Material	
Fasteners	
Sealants	
-	TOOLS
Fasteners [Sealants	TOOLS





SAFETY

• Before entering attic or cutting, put on all personal protection equipment. *This is to reduce the amount of dust particles you breathe, protect your eyes and hands.*

JOB PREP

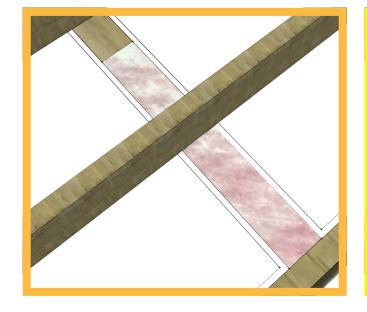
• Measure size and cut <u>filler material</u> larger than opening in all directions.

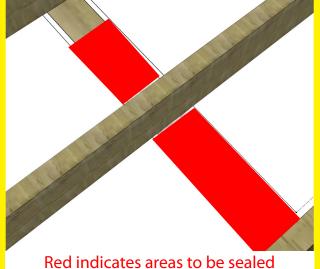
5 - ATTIC CRITICAL DETAIL: OPEN WALL CAVITY

EXISTING HOME TECH TIPS

(SPRAY FOAM)









FILLER MATERIAL

Install filler material. ٠

AIR SEALING

Spray foam. Assure 100% of the edge and • all penetrations are air sealed. The finished foam seal must be rigid and completely covering the *filler material*.

FINAL PRODUCT

6 - ATTIC CRITICAL DETAIL: OPEN FLOOR SYSTEM

EXISTING HOME TECH TIPS

(SPRAY FOAM)

DESIRED OUTCOME(S)

- 1. Air does not enter or exit the house through the open floor system.
- 2. Eliminate bending, sagging or movement.
- 3. Adhesion of sealants to all surfaces to be air sealed in order to stop the passage of air.

EFFECTS ON THE HOUSE

Openings to the attic allow heat, cold and moisture movement to/from the attic and house and may result in decreased durability.

EFFECTS ON THE OCCUPANTS

Intrusion of unhealthy air from unconditioned areas, reduced comfort, possible back drafts containing poisonous fumes and higher utility bills.

MATERIALS	
TOOLS	

Copyright ©2009 Advanced Energy. All Rights Reserved





SAFETY

• Before entering attic or cutting, put on all personal protection equipment. *This is to reduce the amount of dust particles you breathe, protect your eyes and hands.*

JOB PREP

- Measure size and cut <u>filler material</u> larger than opening in all directions. If <u>filler material</u> bends, sags, or moves when in place, a support material must be used.
- If needed, cut <u>support material.</u> <u>Sup-</u> <u>port material</u> must not sag or bend when fastened.
- Fasten any <u>support material</u> in place.

DO NOT USE NAILS



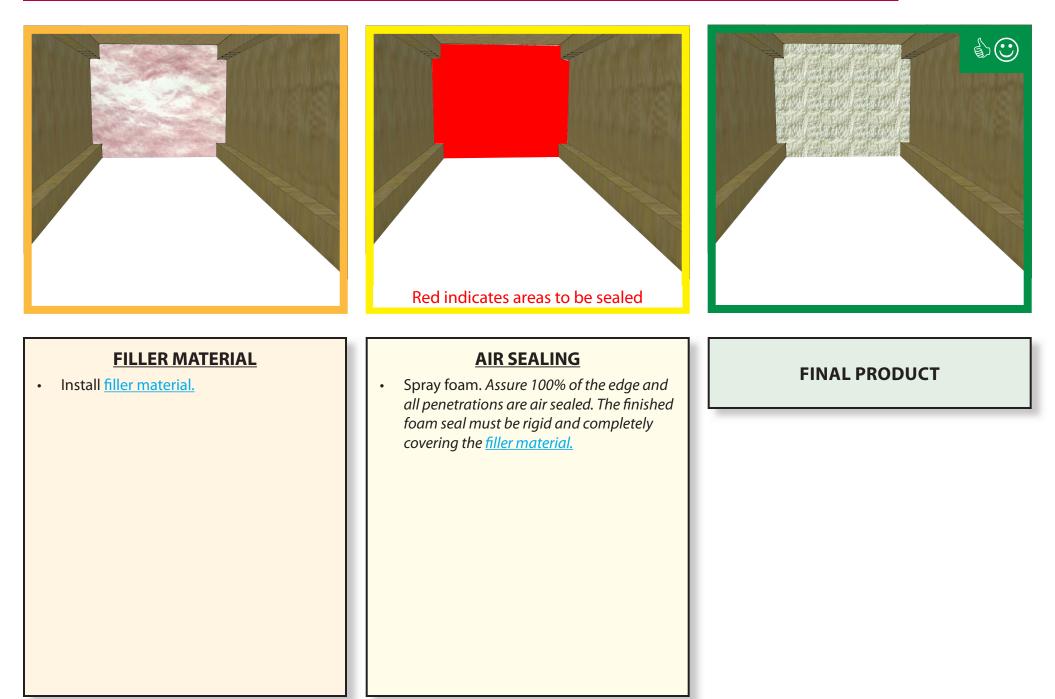


6 - ATTIC CRITICAL DETAIL: OPEN FLOOR SYSTEM

EXISTING HOME TECH TIPS

(SPRAY FOAM)

Advanced



7 - ATTIC CRITICAL DETAIL: WALL TOP PLATE CRACKS, HOLES, & PENETRATIONS



EXISTING HOME TECH TIPS

(SPRAY FOAM)

DESIRED OUTCOME(S)

- 1. Air does not enter or exit the house through wall top plate cracks, holes and penetrations.
- 2. Adhesion of sealants to all surfaces to be air sealed in order to stop the passage of air.

EFFECTS ON THE HOUSE

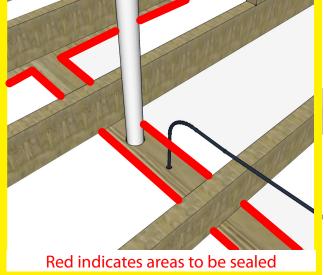
Openings to the attic allow heat, cold and moisture movement to/from the attic and house and may result in decreased durability.

EFFECTS ON THE OCCUPANTS

Intrusion of unhealthy air from unconditioned areas, reduced comfort, possible back drafts containing poisonous fumes and higher utility bills.

MATERIALS	
Filler Material	
Support Material	
Fasteners	
Sealants	
	TOOLS





SAFETY

• Before entering attic or cutting, put on all personal protection equipment. *This is* to reduce the amount of dust particles you breathe, protect your eyes and hands.

AIR SEALING

• Spray foam. Assure 100% of the edge and all penetrations are air sealed. The finished foam seal must be rigid and completely covering wall top plate cracks, holes and penetrations.

7 - ATTIC CRITICAL DETAIL: WALL TOP PLATE CRACKS, HOLES, & PENETRATIONS

EXISTING HOME TECH TIPS

(SPRAY FOAM)







Copyright ©2009 Advanced Energy. All Rights Reserved

8 - ATTIC CRITICAL DETAIL: ADJACENT FRAMING CRACKS, HOLES, & PENETRATIONS



(SPRAY FOAM)

DESIRED OUTCOME(S)

- 1. Air does not enter or exit the house through adjacent framing cracks, holes and penetrations
- 2. Adhesion of sealants to all surfaces to be air sealed in order to stop the passage of air.

EFFECTS ON THE HOUSE

Openings to the attic allow heat, cold and moisture movement to/from the attic and house and may result in decreased durability.

EFFECTS ON THE OCCUPANTS

Intrusion of unhealthy air from unconditioned areas, reduced comfort, possible back drafts containing poisonous fumes and higher utility bills.

MATERIALS	
TOOLS	



SAFETY

• Before entering attic or cutting, put on all personal protection equipment. *This is* to reduce the amount of dust particles you breathe, protect your eyes and hands.



Advan

AIR SEALING

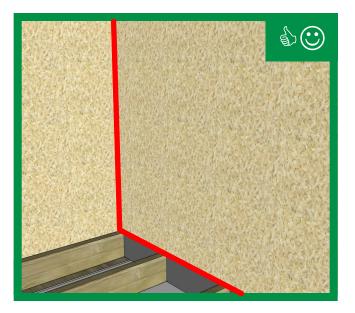
• Spray foam. Assure 100% of the edge and all penetrations are air sealed. The finished foam seal must be rigid and completely covering adjacent framing cracks, holes and penetrations.

8 - ATTIC CRITICAL DETAIL: ADJACENT FRAMING CRACKS, HOLES, & PENETRATIONS Advanced

EXISTING HOME TECH TIPS

(SPRAY FOAM)

FNFF



9 - ATTIC CRITICAL DETAIL: PLUMBING, WIRING, NON-COMBUSTION & DUCTING PENETRATIONS (SPRAY FOAM) EXISTING HOME TECH TIPS



DESIRED OUTCOME(S)

- 1. Air does not enter or exit the house through plumbing, wiring, non-combustion venting and ducting penetrations.
- 2. Adhesion of sealants to all surfaces to be air sealed in order to stop the passage of air.

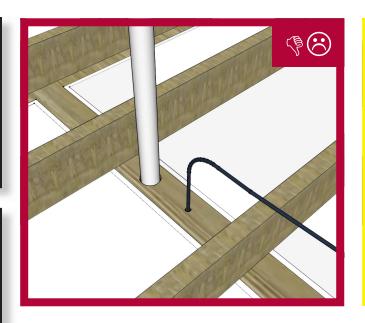
EFFECTS ON THE HOUSE

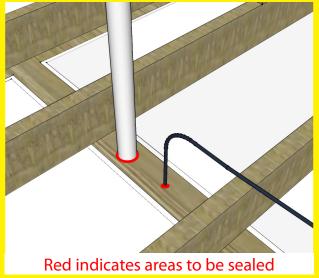
Openings to the attic allow heat, cold and moisture movement to/from the attic and house and may result in decreased durability.

EFFECTS ON THE OCCUPANTS

Intrusion of unhealthy air from unconditioned areas, reduced comfort, possible back drafts containing poisonous fumes and higher utility bills.

MATERIALS	
Filler Material	
Support Material	
Fasteners	
Sealants	
	TOOLS





SAFETY

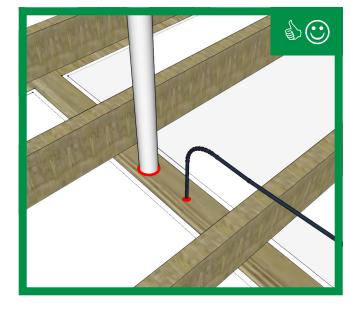
• Before entering attic or cutting, put on all personal protection equipment. *This is* to reduce the amount of dust particles you breathe, protect your eyes and hands.

AIR SEALING

• Spray foam. Assure 100% of the edge and all penetrations are air sealed. The finished foam seal must be rigid and completely covering adjacent framing cracks, holes and penetrations.

9 - ATTIC CRITICAL DETAIL: PLUMBING, WIRING, NON-COMBUSTION & DUCTING PENETRATIONS (SPRAY FOAM) EXISTING HOME TECH TIPS







Copyright ©2009 Advanced Energy. All Rights Reserved

10 - ATTIC CRITICAL DETAIL: INTERIOR FINISH PENETRATIONS



(SPRAY FOAM)

EXISTING HOME TECH TIPS

DESIRED OUTCOME(S)

- 1. Air does not enter or exit the house through penetrations.
- 2. Adhesion of sealants to all surfaces to be air sealed in order to stop the passage of air.

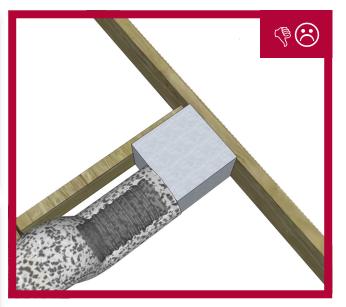
EFFECTS ON THE HOUSE

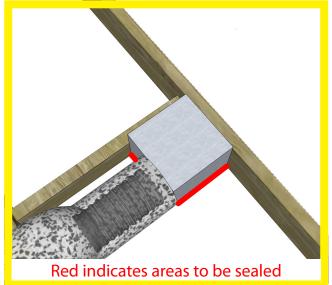
Openings to the attic allow heat, cold and moisture movement to/from the attic and house and may result in decreased durability.

EFFECTS ON THE OCCUPANTS

Intrusion of unhealthy air from unconditioned areas, reduced comfort, possible back drafts containing poisonous fumes and higher utility bills.

MATERIALS	
Filler Material	
Support Material	
Fasteners	
Sealants	
	TOOLS





SAFETY

• Before entering attic or cutting, put on all personal protection equipment. *This is* to reduce the amount of dust particles you breathe, protect your eyes and hands.

AIR SEALING

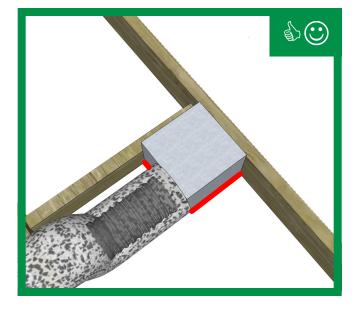
• Spray foam. Assure 100% of the edge and all penetrations are air sealed. The finished foam seal must be rigid and completely covering adjacent framing cracks, holes and penetrations.

10 - ATTIC CRITICAL DETAIL: INTERIOR FINISH PENETRATIONS

EXISTING HOME TECH TIPS

(SPRAY FOAM)







Copyright ©2009 Advanced Energy. All Rights Reserved

11 - ATTIC CRITICAL DETAIL: ATTIC ACCESS HATCHES & DOORS



(SPRAY FOAM)

Advanced ENERGY

DESIRED OUTCOME(S)

- 1. Air does not enter or exit the house through the attic access hatches and doors.
- 2. Adhesion of sealants to all surfaces to be air sealed in order to stop the passage of air.
- 3. All sealants and weather-stripping will stop the passage of air.

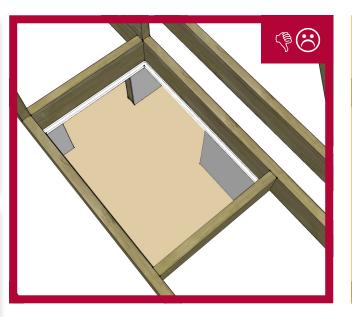
EFFECTS ON THE HOUSE

Openings to the attic allow heat, cold and moisture movement to/from the attic and house and may result in decreased durability.

EFFECTS ON THE OCCUPANTS

Intrusion of unhealthy air from unconditioned areas, reduced comfort, possible back drafts containing poisonous fumes and higher utility bills.

MATERIALS	
Filler Material	
Support Material	
Fasteners	
Sealants	
	TOOLS



Red indicates areas to be sealed

SAFETY

• Before entering attic or cutting, put on all personal protection equipment. *This is to reduce the amount of dust particles you breathe, protect your eyes and hands.*

AIR SEALING

• Air seal **ALL** edges and penetrations. Assure 100% of the edge and all penetrations are air sealed with <u>sealants</u>.

11 - ATTIC CRITICAL DETAIL: ATTIC ACCESS HATCHES & DOORS

EXISTING HOME TECH TIPS

(SPRAY FOAM)

Advanced



12 - ATTIC CRITICAL DETAIL: FIRE RATED WALL & FLOOR PENETRATIONS

EXISTING HOME TECH TIPS

(SPRAY FOAM)



DESIRED OUTCOME(S)

- 1. Air does enter or exit the house through the fire rated wall and floor penetrations.
- 2. Reduce the spread of fire and smoke.
- 3. Reduce the occurrence of fire due the closeness of air barrier system and a combustion source.
- 4. Eliminate bending, sagging or movement that may result in air leakage.
- 5. Eliminate cracking of ceiling materials and nail pops that may result in additional air leakage.
- 6. Adhesion of the sealant to all surfaces to be sealed in order to stop the passage of air.

EFFECTS ON THE HOUSE

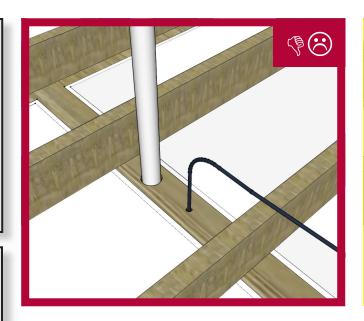
Openings to the attic allow heat, cold and moisture movement to/from the attic and house and may

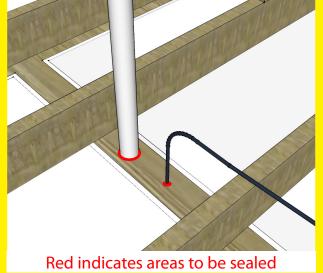
result in decreased durability.

EFFECTS ON THE OCCUPANTS

Intrusion of unhealthy air from unconditioned areas, reduced comfort, possible back drafts containing poisonous fumes and higher utility bills.

MATERIALS	
Air Barrier	
Support Material	
Fasteners	
Sealants	
	TOOLS





SAFETY

• Before entering attic or cutting, put on all personal protection equipment. *This is* to reduce the amount of dust particles you breathe, protect your eyes and hands.

AIR SEALING

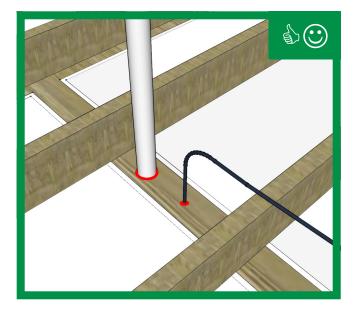
• Air seal **ALL** penetrations through fire rated floors and walls. *Assure 100% of the edge and all penetrations are air sealed with fire rated sealants.*

12 - ATTIC CRITICAL DETAIL: PENETRATIONS THROUGH FIRE RATED WALLS & FLOORS

EXISTING HOME TECH TIPS

(SPRAY FOAM)

Advanced





Copyright ©2009 Advanced Energy. All Rights Reserved

13 - ATTIC CRITICAL DETAIL: FLUE, COMBUSTION VENTS & CHIMNEYS

EXISTING HOME TECH TIPS

(SPRAY FOAM)

DESIRED OUTCOME(S)

- 1. A fire safe air barrier that stops the passage of air into or out of the house through flue, combustion vents and chimneys.
- 2. Reduce the occurrence of fire due the closeness of air barrier system and a combustion source.
- 3. Eliminate bending, sagging or movement that may result in air leakage.
- 4. Eliminate cracking of ceiling materials and nail pops that may result in additional air leakage.
- 5. Adhesion of the sealant to all surfaces to be sealed in order to stop the passage of air.

EFFECTS ON THE HOUSE

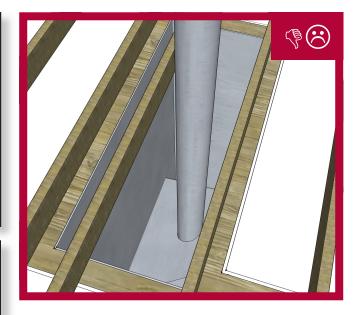
Openings to the attic allow heat, cold and moisture movement to/from the attic and house and may

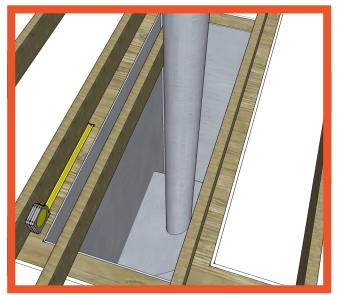
result in decreased durability.

EFFECTS ON THE OCCUPANTS

Intrusion of unhealthy air from unconditioned areas, reduced comfort, possible back drafts containing poisonous fumes and higher utility bills.

MATERIALS		
Air Barrier		
Support Material		
Fasteners		
Sealants		
TOOLS		





SAFETY

• Before entering attic or cutting, put on all personal protection equipment. *This is to reduce the amount of dust particles you breathe, protect your eyes and hands.*

JOB PREP

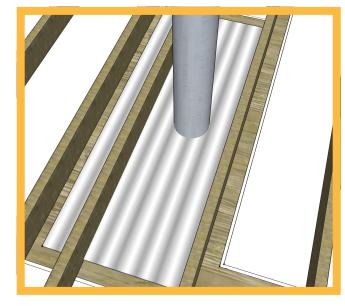
- Measure distance of hole and allow for overlap for <u>fastening</u>.
- Cut metal flashing material.

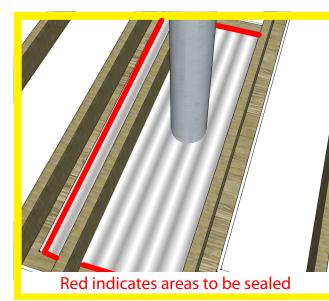
13 - ATTIC CRITICAL DETAIL: FLUE, COMBUSTION VENTS & CHIMNEYS

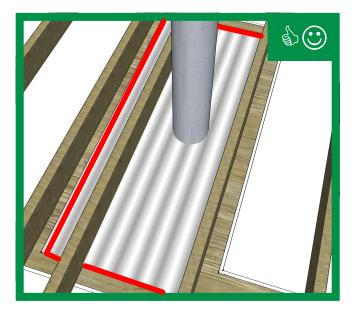
EXISTING HOME TECH TIPS

(SPRAY FOAM)









AIR BARRIER

• Fasten metal flashing material.

DO NOT USE NAILS

AIR SEALING

• Air seal **ALL** edges and penetrations. Assure 100% of the edge and all penetrations are air sealed with <u>fire rated sealants.</u> **FINAL PRODUCT**

