# **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.

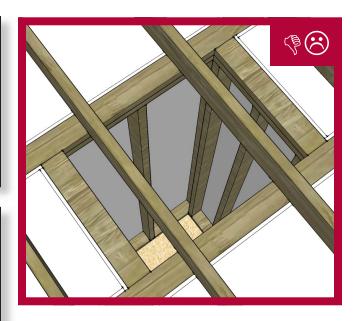
#### **EFFECTS ON THE HOUSE**

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**

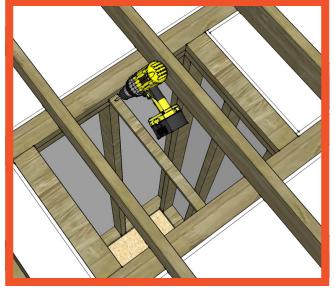
Intrusion of unhealthy air from unconditioned areas, reduced comfort, possible back drafts containing poisonous fumes and higher utility bills.

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.

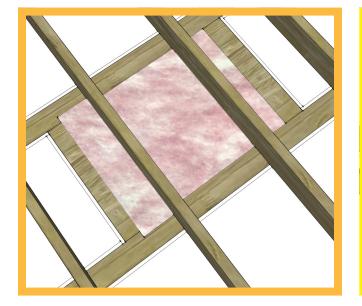
#### **DO NOT USE NAILS**

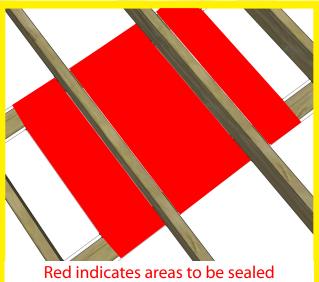
## **1 - ATTIC CRITICAL DETAIL : AIR SEALING A CHASE**

#### **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**

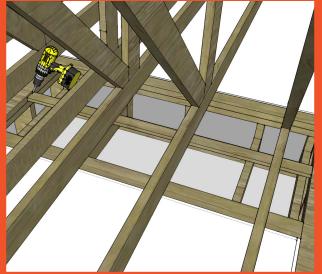
Openings to the attic allow heat, cold and moisture movement to/from the attic and house and may result in decreased durability.

#### **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

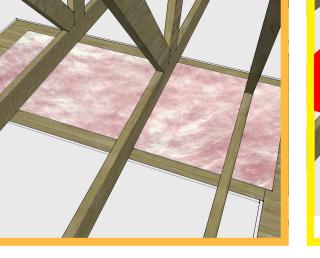
- Measure size and cut <u>filler material</u> larger than opening in all directions. If <u>filler material</u> bends, sags, or moves when in place, a support material must be used.
- If needed, cut <u>support material.</u> <u>Sup-</u> <u>port material</u> must not sag or bend when fastened.
- Fasten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

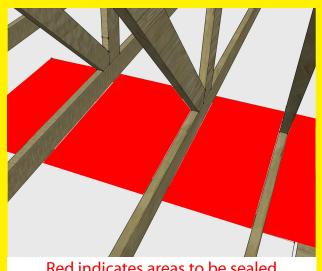
#### **DO NOT USE NAILS**

## **2 - ATTIC CRITICAL DETAIL: DROPPED CEILING**

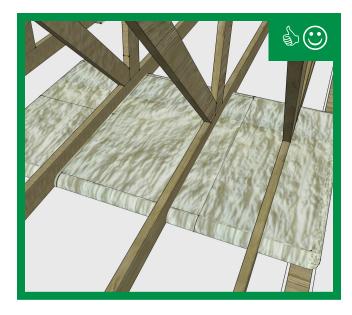
#### **EXISTING HOME TECH TIPS**

#### (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

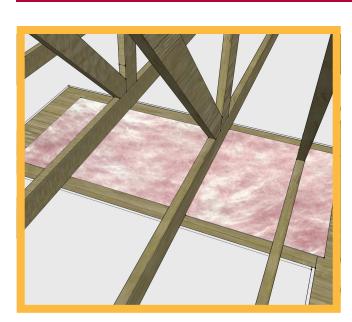
- Measure size and cut <u>filler material</u> larger than opening in all directions. If <u>filler material</u> bends, sags, or moves when in place, a support material must be used.
- If needed, cut <u>support material</u>. <u>Sup-</u> <u>port material</u> must not sag or bend when fastened.
- Fasten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

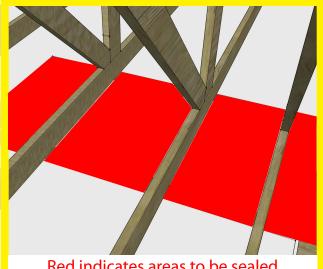
#### **DO NOT USE NAILS**

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

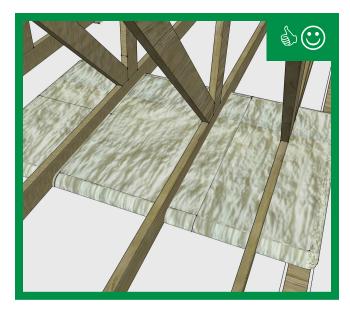
#### **EXISTING HOME TECH TIPS**

#### (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**

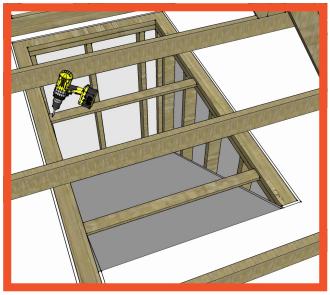
Openings to the attic allow heat, cold and moisture movement to/from the attic and house and may result in decreased durability.

#### **EFFECTS ON THE OCCUPANTS**

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

<b>MATERIALS</b>	
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.

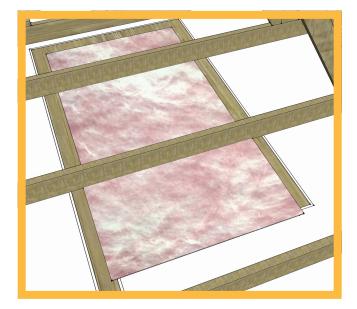
#### **DO NOT USE NAILS**

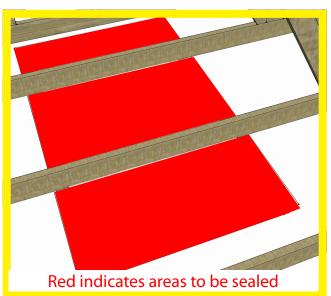
## **4 - ATTIC CRITICAL DETAIL: OPEN STAIRWELL**

#### **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.

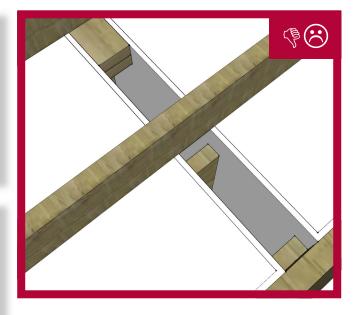
#### **EFFECTS ON THE HOUSE**

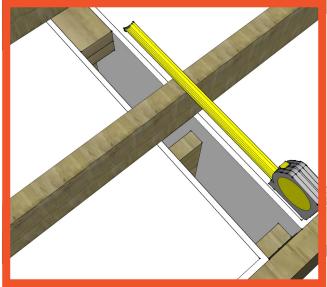
Openings to the attic allow heat, cold and moisture movement to/from the attic and house and may result in decreased durability.

#### **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

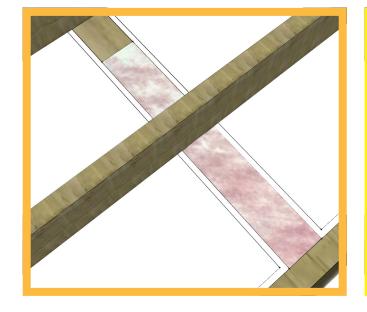
• Measure size and cut <u>filler material</u> larger than opening in all directions.

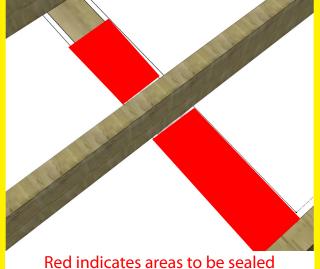
## **5 - ATTIC CRITICAL DETAIL: OPEN WALL CAVITY**

#### **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	

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## **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**



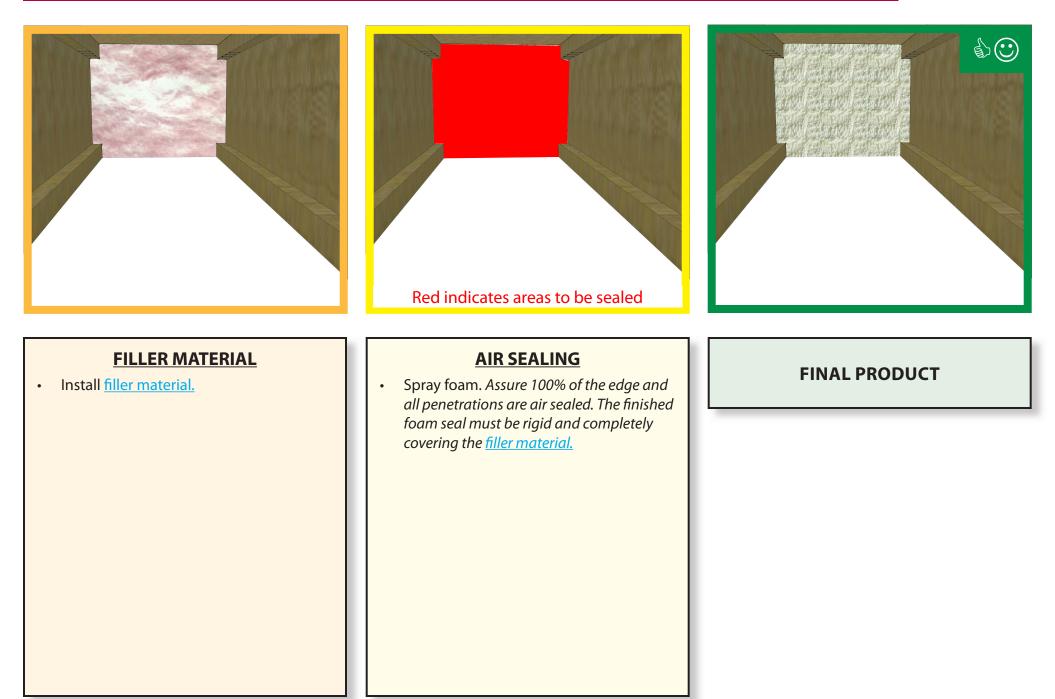


## **6 - ATTIC CRITICAL DETAIL: OPEN FLOOR SYSTEM**

#### **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**

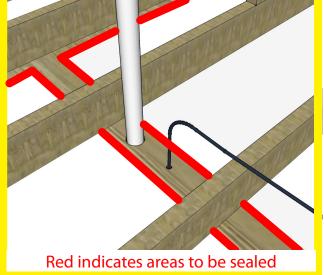
Openings to the attic allow heat, cold and moisture movement to/from the attic and house and may result in decreased durability.

#### **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)







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## 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**

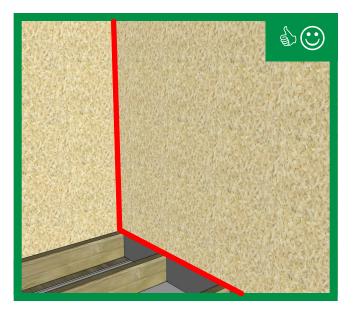
• Spray foam. Assure 100% of the edge and all penetrations are air sealed. The finished foam seal must be rigid and completely covering adjacent framing cracks, holes and penetrations.

# 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.

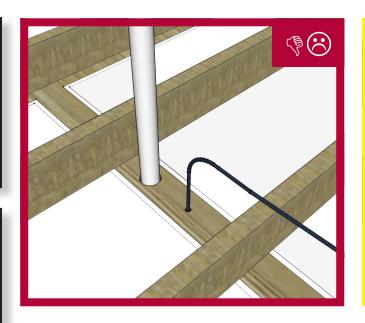
#### **EFFECTS ON THE HOUSE**

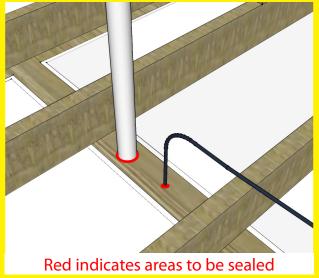
Openings to the attic allow heat, cold and moisture movement to/from the attic and house and may result in decreased durability.

#### **EFFECTS ON THE OCCUPANTS**

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

<b>MATERIALS</b>	
Filler Material	
Support Material	
Fasteners	
Sealants	
	TOOLS





## **SAFETY**

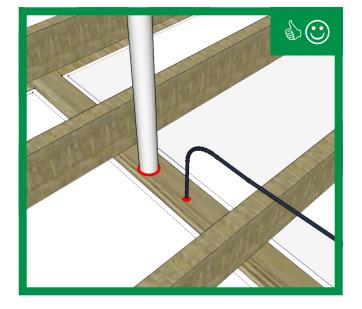
• Before entering attic or cutting, put on all personal protection equipment. *This is* to reduce the amount of dust particles you breathe, protect your eyes and hands.

#### **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







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## **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.

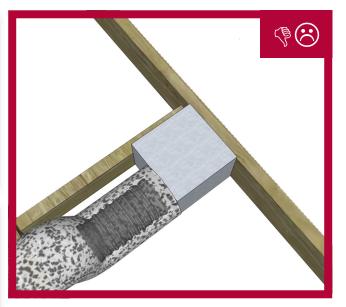
#### **EFFECTS ON THE HOUSE**

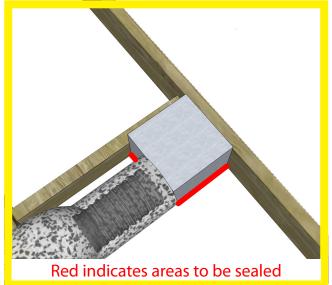
Openings to the attic allow heat, cold and moisture movement to/from the attic and house and may result in decreased durability.

#### **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**

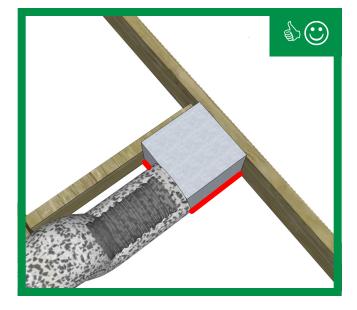
• Spray foam. Assure 100% of the edge and all penetrations are air sealed. The finished foam seal must be rigid and completely covering adjacent framing cracks, holes and penetrations.

## **10 - ATTIC CRITICAL DETAIL: INTERIOR FINISH PENETRATIONS**

#### **EXISTING HOME TECH TIPS**

(SPRAY FOAM)







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# **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.

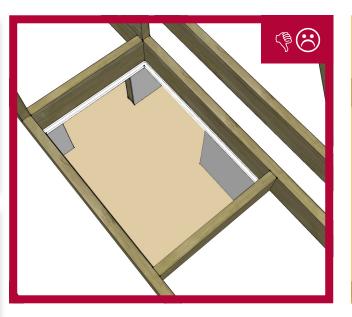
#### **EFFECTS ON THE HOUSE**

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.

<b>MATERIALS</b>	
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

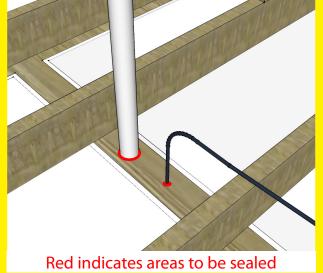
result in decreased durability.

#### **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**

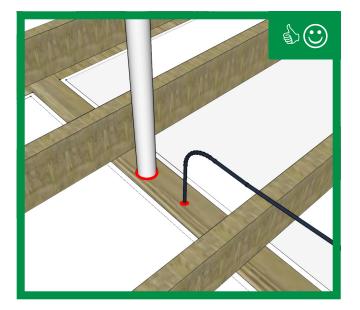
• Air seal **ALL** penetrations through fire rated floors and walls. *Assure 100% of the edge and all penetrations are air sealed with fire rated sealants.* 

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

#### **EXISTING HOME TECH TIPS**

(SPRAY FOAM)

**Advanced** 





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# **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**

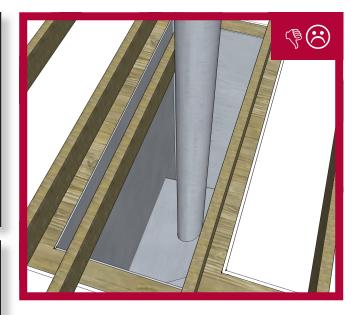
Openings to the attic allow heat, cold and moisture movement to/from the attic and house and may

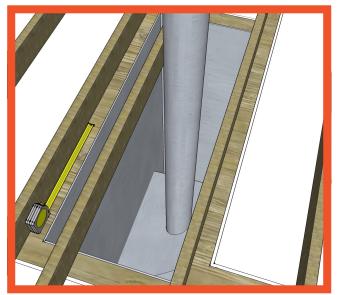
result in decreased durability.

#### **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

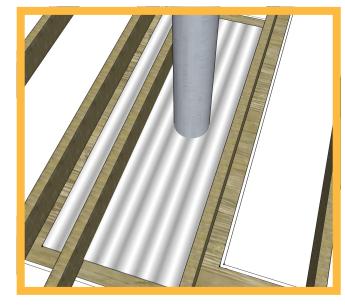
- Measure distance of hole and allow for overlap for <u>fastening</u>.
- Cut metal flashing material.

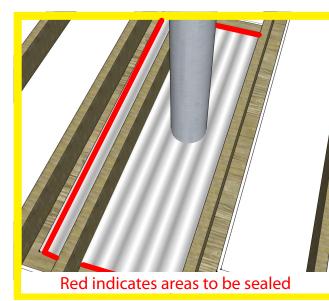
# **13 - ATTIC CRITICAL DETAIL: FLUE, COMBUSTION VENTS & CHIMNEYS**

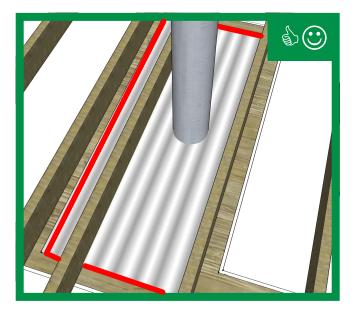
#### **EXISTING HOME TECH TIPS**

#### (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** 

