

# ***RETROFIT***

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# MASONRY CHAINSAWS

- [https://www.youtube.com/watch?v=n\\_CBpJNxdag](https://www.youtube.com/watch?v=n_CBpJNxdag)

NOTE the safety equipment

- [https://www.youtube.com/watch?v=FqFIg\\_VNEGM](https://www.youtube.com/watch?v=FqFIg_VNEGM)
- <https://www.youtube.com/watch?v=RfFop4ayfOo>

How to cut

- <https://www.youtube.com/watch?v=l0xEOrJ9jV8>

Thick poured concrete wall

- <https://www.youtube.com/watch?v=YNlrSxRurco>

# **DIAMOND TIPPED (WET) CHAINSAW RETROFIT**

## **LIFE OF CHAIN: 30-50 LINEAR FEET**

subjective to rebar and hardness of concrete

Average crawlspace opening: 16" x 8" or 128 square inches

ICC-ESR 2074 compliant vent (16" x 8") provides 200 SQ IN of enclosure opening

Average house: 1,200 – 2,000 square feet

Using ICC-ESR compliant vent, need 6-10 vents

ONE 16 x 8 vent is 48" of cutting, or 4' per opening

SIX openings: 24 linear feet; TEN openings: 40 linear feet

**ASSUME ONE CHAIN PER JOB**

# **DIAMOND TIPPED (WET) CHAINSAW RETROFIT**

MATERIALS: \$2,600 - \$3,400

CHAINSAW BODY: \$2,000 - \$4,000 (INITIAL INVESTMENT)

Prorate \$500 per job (gas, maintenance, etc.)

CHAIN: \$900 PER JOB

VENTS: 6-10 VENTS: \$1,200 TO \$2,000

*VENTS FOR ATTACHED GARAGE SLIGHTLY MORE AND NOT INCLUDED*

# **DIAMOND TIPPED (WET) CHAINSAW RETROFIT**

LABOR: \$900

1 HOUR PER OPENING TO CUT AND INSTALL VENT

16 HOURS TOTAL @ \$60/HOUR = \$1,000

# DIAMOND TIPPED (WET) CHAINSAW RETROFIT

## INSTALLATION COSTS

\$2,600	MATERIALS – 6 VENTS
\$1,000	LABOR
\$ 100	TRIP FEE
\$1,000	OVERHEAD
<u>\$1,000</u>	PROFIT
\$5,700	6 VENTS
\$6,400	10 VENTS

# **DIAMOND TIPPED (WET) CHAINSAW RETROFIT**

SURVEYING COSTS: \$1,500

HIRE SURVEYOR TO COLLECT ELEVATIONS AND COMPLETE ELEVATION  
CERTIFICATE

# DIAMOND TIPPED (WET) CHAINSAW RETROFIT

## EXCLUDED COSTS

- BACKFILLING CRAWLSPACE TO MEET 5' RULE OR 2/5 RULE
  - **NOTE:** YOU WILL WANT TO DO THIS ***BEFORE*** INSTALLING VENT!!!!
- BACKFILLING BASEMENT TO CRAWLSPACE, MEETING 5' RULE OR 2/5 RULE
  - **NOTE:** YOU WILL WANT TO DO THIS ***BEFORE*** INSTALLING VENT!!!!
- RELOCATING DUCTWORK AND OTHER UTILITIES (FURNACE, HOT WATER HEATER, ELECTRICAL LINES/PANEL, PLUMBING)
- CUTTING/INSTALLING VENTS IN ATTACHED GARAGE

# **DIAMOND TIPPED (WET) CHAINSAW RETROFIT**

**FINAL ESTIMATED COSTS: \$7,200 - \$7,900**

INSTALLATION COSTS: \$5,700 - \$6,400

SURVEYOR COSTS: \$1,500

# NOW LET'S LOOK AT INSURANCE COSTS BEFORE THE RETROFIT

## SINGLE FAMILY HOME, \$150,000 BLDG COVERAGE

SINGLE STORY, PRIMARY RESIDENCE

BFE IS 1 FOOT ABOVE NATURAL GRADE

1. PRE-FIRM, (*NON-COMPLIANT* CRAWLSPACE): \$2,300
2. PRE-FIRM, *NON-COMPLIANT* CRAWLSPACE FLOOR AT -4 BFE (3' BELOW GRADE): \$2,850
  - CRAWLSPACE CONSIDERED BASEMENT; BLDG IS NOW RATED AS NONELEVATED WITH 2 STORIES (3.15/.54)
3. POST-FIRM, COMPLIANT CRAWLSPACE, FINISHED FLOOR AT 0 BFE (1' ABOVE GRADE): \$1,550
4. **POST-FIRM, COMPLIANT CRAWLSPACE, FINISHED FLOOR AT +1 BFE (1' ABOVE GRADE): \$750**

# **SO WHERE TO START?**

**GET AN ELEVATION CERTIFICATE FOR YOUR  
PRE-FIRM BUILDING**

**(YOU'RE GONNA NEED ONE EVENTUALLY)**

# SO WHERE TO START?

IF YOUR FINISHED FLOOR ELEVATION IS 0.5' OR MORE

ABOVE THE BFE, THEN *RETROFITTING*  
IS A COST SAVINGS EFFORT FOR YOU!

- PRE-FIRM: \$2,300 VS. POST-FIRM +1 BFE: \$750
  - A COST SAVINGS OF \$1,550 IN THE FIRST YEAR!!!!!!
  - ADDED BONUS? Flood insurance policy will be re-endorsed for the premium year you did the work!!!!!!!!!!!!
  - Let's say the final cost of your retrofit is \$10,000 and your insurance premium is \$2,300. All in: \$12,300. Submit the EC and you get a refund for \$1,550. How long to recoup the remaining dollars (\$10,750)? **About 7 years!!!!**

# **AND YOU WHAT'S REALLY, REALLY COOL?**

- **ANY** of the other improvements to your home such as a kitchen remodel, bath remodel, new addition for the master bedroom suite – you can expect close to the standard rate of return for your efforts as compared to buildings OUTSIDE the Special Flood Hazard Area!!!!

**AWESOME!!!!**

- Some properties might even experience a BETTER Rate of Return than average because of LOCATION!!!! (not everybody has a creek or a greenbelt running behind their property, ya' know).

# FINAL THOUGHTS

**THE HIGHER YOUR FINISHED FLOOR ELEVATION IS ABOVE THE BFE (EXCLUDING YOUR BASEMENT, OF COURSE), THE MORE INCENTIVE YOU HAVE TO RETROFIT THAT BUILDING AND ENJOY THE BENEFITS OF LOWER RISK, LOWER INSURANCE COSTS, AND *INCREASED RESALE VALUE!!!!!!!***