

# Residential Dwelling Addition Cross Section

## A. Roof System

Pitch: example 4/12 or 6/12

Roof type: Gable, Hip, Shed, or Other

Covering: Shingles, Metal, or Other

\*Ice shield is required from eaves edge to at least 24" inside exterior wall line

## B. Walls

Stud framing size: example 2x4 or 2x6

Exterior wall covering: Vinyl, Aluminum, Brick, or Other

## C. Floor System

Joist type: Dimensional lumber or I-Joist

## D. Foundation

Slab on grade: minimum 3.5" thick slab required with vapor barrier

Crawlspace: 4 options available - see page 2

Anchor bolts:

Length: minimum 10"

Spacing O.C.: slab & crawlspace: every 6' and within 12" of ends/splices

basement: determined by the amount of unbalanced backfill

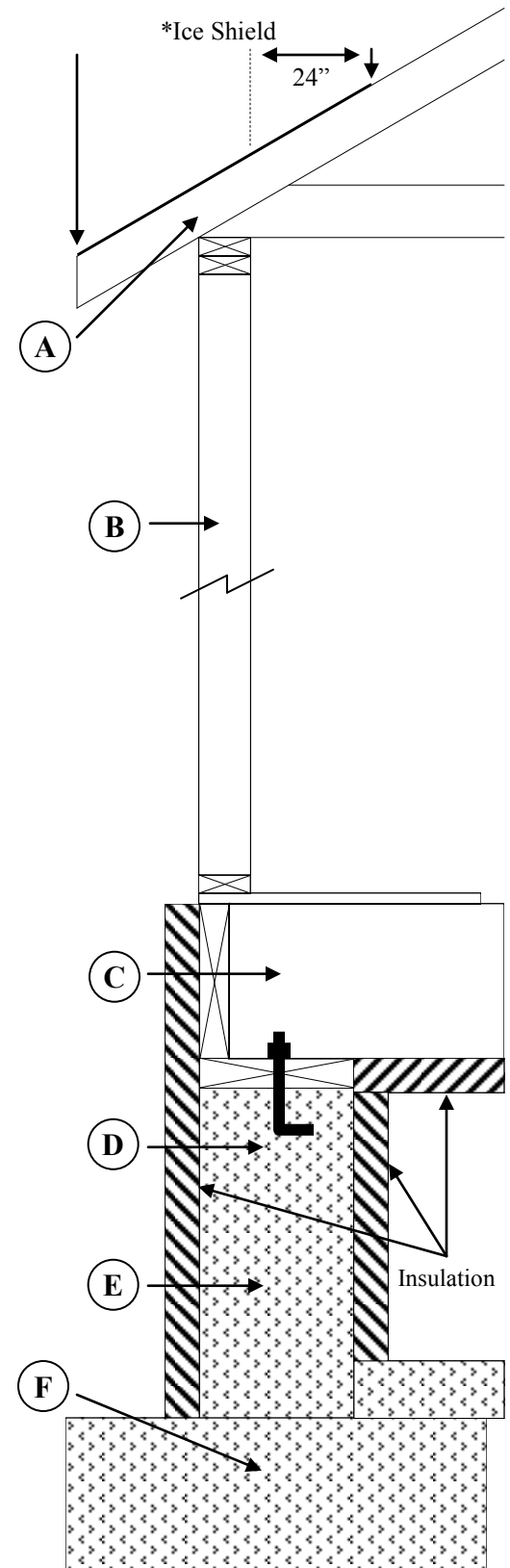
## E. Basement Walls (if applicable)

Plumbing to be installed: Sump pump or Sewage ejection pump

## F. Footings

Type: Trenched or Spread

Depth: minimum 36" below undisturbed grade



# Approved Crawlspace Options

## Crawlspace Option #1: Vented Crawlspace

Floor Insulated to R-25

Duct Insulated: R-4.2 (N 1104.3)

HVAC Duct

Grade

Vent required within 4' of each corner and 1 sq. ft. of net vent opening for every 1,500 sq. ft. of crawlspace area when vapor barrier installed, or space may be mechanically ventilated at a rate of 1.0 CFM for each 50 sq. ft. of crawlspace area.

6 mil Vapor Barrier

## Crawlspace Option #2: Non-Vented Crawlspace

End of joist space insulated to R-19

Not insulated and no openings into crawlspace

HVAC Duct

Grade

Wall insulated from floor joist to grade level and an additional 24" vertically, horizontally, or a combination of both

Electrical receptacle and 16" X 16" hard surface pad for dehumidifier

24"

6 mil Vapor Barrier

## Crawlspace Option #3: Conditioned Crawlspace

End of joist space insulated to R-19

Return Duct

Supply Duct

Grade

Wall insulated to R-7. Insulation must be compatible with interior atmosphere (if blue-board, must be covered with drywall or other approved rated material)

Air Circulated from HVAC duct's through crawlspace at 1 CFM for every 50 sq. ft.

6 mil Vapor Barrier under minimum 2" concrete slab

## Crawlspace Option #4: Underfloor Plenum

Non-combustible receptacles below floor openings: 3" beyond edges of opening with a 1" lip on all sides and not more than 18" below opening

Furnace duct 6" below combustible construction, furnace output air temperature: 150° F- 200° F

End of joist space insulated to R-19

Grade

Wall insulated to R-7. Insulation must be compatible with interior atmosphere (if blue-board, must be covered with drywall or other approved rated material)

4 mil Vapor Barrier

*\*All options require that crawlspace floor (gravel or concrete) be sloped to the required sump pit*