



State of Ohio
Weatherization Program
Standards

Section **BUILDING SHELL
INSTALLATION**

Subject **Attic Floor**

ELECTRICAL SYSTEM SAFETY 302-3.1

Correct electrical problems such as unsafe wiring, uncovered junction boxes, or electrical situations which must be corrected prior to performing any other work in the attic(s). If insulation exists, ensure that wiring is in a safe and legal state.

wiring
302-3.1a



All electrical junctions must be flagged and be installed in covered junction boxes.

junction boxes
302-3.1b

Install safety clearance shielding around all heat producing electrical devices such as recessed lights without an IC (insulation contact) rating, vent fans, etc.

electrical clearances
302-3.1c



If knob and tube wiring is in use, install proper sized S-type fuses in boxes that contain fuses before installing any insulation.

S-type fuses
302-3.1d

HAZARDS 302-3.2

Use appropriate personal protective equipment (PPE) and work practices in the presence of animal or insect hazards. Ensure personal safety during work.

health hazards
302-3.2a



Remove any stored items that need to be moved in order to install attic insulation effectively.

stored objects
302-3.2b

Repair any rotted, broken, or damaged attic structural components. Ensure that the ceiling will safely hold the weight of the insulation. Repair or replace any weakened, damaged, or missing interior ceiling surface.

ceiling repair
302-3.2c

ATTIC ACCESS 302-3.3

When it is necessary to install an interior access in the ceiling, it must be at least 14 1/2" x 24", and shall be weatherstripped and insulated to the same level as the attic floor. If there is an existing fold-down stairs, a coffin type hatch shall be made. The lid and the sides of this hatch shall have the same R-value as the rest of the ceiling and be weatherstripped.

**attic access hatch-
ceiling**
302-3.3a

**attic access hatch--
kneewall**
302-3.3b

When it is necessary to install an interior attic access in a kneewall, it must be at least the kneewall stud cavity width x 24", and shall be weatherstripped and insulated to R-19. A latch shall also be installed to ensure airtightness.

**access--insulation
dam**
302-3.3c

A ceiling access shall have an insulation dam, made of rigid materials, that exceeds the height of the insulation to be installed. The dam must be strong enough to hold the weight of a person entering or exiting the attic.

exterior access
302-3.3d

If there are no interior accesses, at least one exterior access to each attic space shall be left unsealed for inspection purposes.

ATTIC PREPARATION FOR INSULATION 302-3.4

thermal bypasses
302-3.4a

Locate and seal attic thermal bypasses, chaseways, and open-topped partition walls. Deal with ceiling height changes and stairwells as necessary to stop bypass leakage. Seal kneewall floor cavities. Check for completion of bypass sealing before installing any insulation (see 1506-3).

**blocking for
insulation**
302-3.4b

Block around recessed lights which do not have an IC (insulation contact) rating and other electrical devices such as fan units. Seal around flue pipes and chimneys with noncombustible materials and install blockage to ensure proper clearances for the type of flue or chimney. When insulating stairs to an attic, a chimney liner may need to be installed if the chimney is against the stairs or the walls of the walk-up attic. Blown fiberglass may be used.

existing attic vents
302-3.4c

Ensure that existing vents are not blocked, crushed or otherwise obstructed. Correct problems as necessary, or replace.

**attic vent
installation**
302-3.4d

Install venting as directed by the work order. Install high roof vents as close to the ridge as possible. Install high gable vents at least 3' above the soffit or gable vent used for low venting.

If directed by the work order, prepare to add necessary insulation to eliminate voids and areas of incomplete coverage. Cut existing fiberglass batts back 2' from the soffit and prepare to dense pack the perimeter. Prepare floored areas or other restricted zones with existing insulation for high density application.

existing insulation
302-3.4e

Prior to insulating, ensure that any areas insulation should not contact are thoroughly blocked and that blocked electrical devices will be temporarily covered while blowing insulation.

temporary cover
302-3.4f

Repair or replace weak or damaged sections of plaster or drywall to ensure stability of insulation.

damaged plaster repair
302-3.4g

Install house wrap air barrier material tightly to the kneewall framing using staples or other appropriate fasteners spaced no more than 3 inches apart. No material may be used which would create a vapor barrier. Install additional horizontal strapping so that there is no more than 3 feet between straps or between straps and the top or bottom of the wall. Install house wrap material along floor and rafter framing so that insulation may be installed in a continuous fashion. After insulation is installed, secure the house-wrap to the slope and floor with staples.

prep kneewalls for dense pack
302-3.4h

ATTIC INSULATION 302-3.5

Do not install cellulose insulation when it will be in contact with an exposed metal roof. Use another insulation type.

metal roof/ insulation
302-3.5a

Insulate uninsulated open joist attics to R-38. Add insulation to other areas as necessary or as directed.

insulation--open joist
302-3.5b

Insulate enclosed areas (under floors, slopes, under kneewall cavities, etc.) to high density level as follows:

insulation--enclosed
302-3.5c

- blown cellulose 3.25 to 3.75 lb/ft³
- blown fiberglass 1.6 lb/ft³

Insulate kneewall areas as follows:

kneewalls
302-3.5d

- blown cellulose 3.25 to 3.75 lb/ft³
- blown fiberglass 1.6 lb/ft³
- fiberglass batts R-19

insulation - kneewall
302-3.5e

Insulate kneewalls with an appropriate insulation that completely fills the cavities. If installing fiberglass batts or if batts are existing, housewrap must encapsulate the insulation.

Install netting, housewrap, or rigid insulation, which is appropriately attached, and must be installed for blown insulation.

air barrier
302-3.5f

Install an air barrier at the bottom of each slope area, including cathedral ceilings, whether the areas are insulated or not.

perimeter pull
302-3.5g

Where there are existing fiberglass batts, use the perimeter pull method (see 1504 Abbreviations and Definitions).

*CERTIFICATE OF INSULATION 302-6***certificate of
insulation**
302-3.6a

Post a consumer information card or certificate of insulation which complies with OAC 109:4-3-14 on, or adjacent to, the electric service panel.